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## WILL THE PRESENT UPWARD TREND OF WORLD PRICES CONTINUE?

The whole civilized world is now eager to know whether in the future the high cost of living is to advance further, recede, or remain stationary. Opinions are plentiful but data supporting them are few. Even the best forecasts I have seen appear to be based on a very incomplete comprehension of the problem. Many conceive it as a problem of ordinary supply and demand and discuss the general *price level* as they would discuss the *price* of wheat or any other commodity, overlooking the fact that the causes affecting price levels are as distinct from those affecting an individual price as the causes affecting the tides are distinct from those affecting an individual wave.

The problem of the cost of living is primarily a problem of the general level of prices, although it is also partly a problem of special prices. If the phrase "cost of living" were used to refer to the general level of all prices the problem would be purely of the former type and not at all of the latter. But this phrase is usually taken as referring only to special groups of commodities, mostly foods, and only for the retail prices of these commodities. The general level of prices, on the other hand, means the level of *all* prices, whether retail, wholesale, jobbing, factory or farm prices, and of all commodities, whether of food, raw material, machinery, land, stocks, bonds, or any other goods whatsoever which are bought and sold. Now, the "cost of living" will go up and down with the general level of prices and at the same time fluctuate from special causes of its own, just as a buoy in the ocean goes up and down not only with the tides but also with the waves.

The statistics of the past indicate that the recent rise in the cost of living has been for the most part due to the general rise in prices of all kinds, and only to a small extent, if at all, to special causes applying to the retail price of foods. In what follows we shall discuss only the causes affecting the general level of prices.

Those who choose to apply the results to the retail prices of food and other "living" should take account also of the minor and special causes pertaining to these particular prices.

If I am correct in my philosophy of price levels (as stated in my book, *The Purchasing Power of Money*) the general level of prices in the world is determined by the other five magnitudes which are joined with it in "the equation of exchange."<sup>1</sup> No other considerations whatever are relevant—trusts, tariffs, trade unions, shorter hours, limitation of output of labor, exhaustion of the soil, concentration of population in cities, middlemen, advertising, overcapitalization, restrictive legislation, cold storage, pure food legislation, sanitary legislation, food adulteration, the "individual package," extravagance, world armaments, wars, old-age pensions, unemployment, etc.—except so far as these factors affect one or more of the five factors in the equation of exchange which alone can act on the general level of prices. All the causes above enumerated and many more may, of course, affect the price level by affecting these five factors, but not otherwise.

The proper mode of procedure is therefore to make a forecast as to these five factors. Thus far only one of them, the volume of money in circulation, has received much attention, and even the discussion of this factor has not proceeded along the lines proper for a correct forecast. For instance, it is often taken for granted that as soon as the gold production begins to subside the price level will begin to subside also. This is a gross error. The price level does not depend directly on the *rate* of gold production but on the *stock* of gold and other money. The question is not one of an increasing or decreasing annual production of gold. The inflowing stream of gold is of significance only as it affects the contents of the reservoir into which it flows. A lake does not cease rising the instant the freshet filling it reaches its maximum flow. The lake will still continue to rise *so long as the inflow continues greater than the outflow*. This is often long after the inflow has passed its maximum.

<sup>1</sup> For full explanations see *The Purchasing Power of Money* and "The Equation of Exchange [in the United States] for 1911," in this journal, June, 1912. The equation is  $MV + M'V' = PT$  in which the letters have the significance indicated at the top of the diagram in this article. In brief *M* is money in circulation; *V*, its velocity; *M'*, deposits subject to check; *V'*, their activity; *P*, the price level; and *T*, the volume of trade. For reasons given in *The Purchasing Power of Money*, *P* is to be considered the effect of *M*, *M'*, *V*, *V'*, and *T*.



The problem, then, is to forecast the future world stock of money. But it is more than this. Even if we forecast the world's stock of money, we must still take account of the other four price-influencing factors in the equation of exchange. In particular we must not forget the increasing use of deposit currency by means of checks. This factor, which is certain to play an increasingly important role in future price movements, has been almost wholly neglected in the discussions of this subject.

The problem of forecasting future price levels is, then, nothing more or less than the problem of forecasting the five factors which fix price levels, viz.,  $M$ ,  $M'$ ,  $V$ ,  $V'$  and  $T$ . In the article "The Equation of Exchange for 1911 and Forecast" in the June number of this Journal, the statistics of these magnitudes for the United States were given for the years 1896 to 1911 inclusive. The figures for 1896 and 1911 are reproduced. I have added the percentage rates of growth per annum between these dates.

MAGNITUDES IN THE EQUATION OF EXCHANGE AND THEIR RATES OF GROWTH PER ANNUM (FOR THE UNITED STATES).

	Money <sup>1</sup>	Deposits <sup>1</sup>	Velocity <sup>2</sup> (m'n'y)	Velocity <sup>2</sup> (deposits)	Price level <sup>3</sup>	Volume of trade <sup>4</sup>	Money expenditure <sup>1</sup>	Check expenditure <sup>1</sup>	Total expenditure <sup>5</sup> $MV + M'V'$ & $PT$
	$M$	$M'$	$V$	$V'$	$P$	$T$	$MV$	$M'V'$	
Absolute figures for 1896	0.88	2.71	18.8	36.6	60.3	191	16	99	115
Absolute figures for 1911	1.64	7.78	20.9	49.9	102.2	413	34	388	422
Percentage rate of growth per annum, 1896-1911	4.2	7.3	0.7	2.0	3.5	5.3	5.20	9.5	9.1

<sup>1</sup> Measured in billions of dollars.

<sup>2</sup> Number of times turned over per year.

<sup>3</sup> As a percentage of the price level of 1909.

<sup>4</sup> Measured in units each worth \$1 in 1909.

<sup>5</sup> Measured in billions of dollars. This column includes not only "total expenditures" ( $MV + M'V'$ ) but also its equal, "total value of goods purchased" ( $PT$ ).

We see that the deposits subject to check have increased with great rapidity (7.3 per cent per annum) and that the use of these deposits by checks increased still more rapidly (9.5 per cent). Both far outstripped trade which increased at 5.3 per cent, although trade outstripped money which increased at 4.2 per cent.

In the above mentioned article it was emphasized that we could not fully understand the causes influencing the price level of the United States without considering the conditions in other nations. Problems of money and prices are peculiarly international in their nature and no trustworthy forecast can be made without taking account of world conditions.

Unfortunately, as yet we have no data approaching in completeness those for the United States, by which we can estimate even by very rough approximations the six magnitudes ( $M$ ,  $M'$ ,  $V$ ,  $V'$ ,  $P$ ,  $T$ ) for the world as a whole. By "the world" is here meant the gold standard world.<sup>2</sup> Rough estimates (about 11 or 12 billions) have been made for the total money in the (gold standard) world, and a rougher estimate (about 15 billions) could be made for deposits subject to check. As to the other magnitudes in the equation, however, we have no clue except the calculations above given for the United States.

But, instead of attempting to estimate the *absolute* values of the six magnitudes in the equation of exchange, we may estimate approximately the percentage rates at which these magnitudes are increasing. Even this estimate will necessarily be rough, but there are so many fragmentary indications or straws which show which way the wind is blowing that the results have, I believe, some value. If the present plan for an International Conference on the Cost of Living should be adopted, one of the most important results would presumably be a completer investigation than is now possible and, in consequence, an exacter estimate of these rates of increase. Possibly it is not too much to hope that we might then be able to ascertain even the absolute values of the magnitudes in the equation of exchange for certain leading nations.

The following<sup>3</sup> statistics show the estimated percentage *rates*

<sup>2</sup> This now includes practically the whole money-using and bank-using world except China.

<sup>3</sup> This table and the other tables which follow in this article are based on data between 1896 and 1911 as available. The data were derived as follows:

$M$ . The rates of increase of the quantity of money in circulation are calculated as the rates of increase of the total quantities of money in the various countries (including bank reserves and government accumulations). They are taken from the Comptroller's Reports for 1897, 1904, and 1911. Forty-six countries are included.

$M'$ . The rates are calculated from "individual deposits" in the United States and corresponding foreign deposits, so far as fragmentary data permit. The data are from the United States Comptroller's Reports, Conrad's *Hand-*

of increase in recent years of the six magnitudes in the equation of exchange for the four foreign countries of chief interest to the United States, together with certain derivative magnitudes. As the figures can be only rough estimates, they are not given nearer than to the nearest half of one per cent.

Country	Recent Percentage Rates of Growth per annum of:								
	Money	Deposits	Velocity of money	Activity of deposits	Price level	Volume of trade	Money expenditures	Check expenditures	Total expenditures
	$M$	$M'$	$V$	$V'$	$P$	$T$	$MV$	$M'V'$	$MV + M'V'$
Canada	9	12	$\frac{1}{2}$	-1	2	7	9½	11	11
Great Britain	$\frac{1}{2}$	3½	0	1½	1½	8+	$\frac{1}{2}$	5	4½
Germany	2½	13	0	-6½	2½	6	2½	5½	5
France	1	7	0	4	2	3	1	11	5-8

The chief errors or discrepancies in this table are doubtless those in the rates found for  $V'$ . The reason is that these rates are derived indirectly, by subtracting the rate of increase of  $M'$ , from the

*wörterbuch der Staatswissenschaften*, Mulhall's *New Dictionary of Statistics* (edited by Webb), and *The Encyclopedia Britannica*. Deposits include more or less complete statistics for the United States, Canada, Great Britain, Australia, Germany, France, Austro-Hungarian Bank, Holland, Denmark, Norway, Mexico, Sweden, Switzerland, Russia, Japan, India.

$V'$ . Rates here are guesses based on the fact that the previous calculations for the United States show a rate of increase of 0.7 per cent. It is assumed that this rate—slightly over  $\frac{1}{2}$  per cent—applies to Canada and, to be conservative, that in all other countries it is negligible. Later we shall give reasons for believing that the velocity of circulation is really increasing although we have no means of knowing at what rate.

$M'V'$ . The percentage rate of increase of  $M'V'$  (the total check expenditure) is assumed to be equal to the percentage rate of increase of bank clearings. The statistics of bank clearings are taken from the same sources as those of deposits. The clearings used for "France" are only those for Paris. Statistics of clearings for "English Speaking" nations include the United States, Canada, England (London and four other principal towns), and Australia (Sydney, 7 per cent and Melbourne, 5 per cent). The statistics of clearings for "Continental Europe and Japan" include the clearings for Italy (11 per cent) and Austria (15 per cent, comprising Brünn, Prague, Budapest and Vienna).

$V'$ . This is calculated as the excess of the percentage increase in  $M'V'$  over that in  $M'$ .

rate of increase of  $M'V'$ ; when opposite errors occur in these two magnitudes ( $M'$  and  $M'V'$ ) the consequence is a cumulative error in  $V'$  which may become either too large or too small. The results, therefore, for  $V'$  are believed to have practically no value. Most of the other figures are probably approximately correct. We see that the money in circulation is increasing with great rapidity in Canada (9 per cent per annum) and only slightly in the other countries in the table, that deposits subject to check are increasing with greatest rapidity in Canada and Germany and least in Great Britain, that the volume of trade is increasing twice as fast in Canada and Germany as in Great Britain and France, and that the price level is increasing about 2 per cent per annum in all countries.

$MV + M'V'$ . The method of averaging the rates of increase of  $MV$  and  $M'V'$  so as to get the rate of increase of  $MV + M'V'$  has been to weight them by using the estimated relative volumes of deposits and of money in circulation, and remembering that the deposits (judging from the United States) have at least twice the velocity of circulation of the money.

P. Price statistics include not only those separately given in the tables but also Belgium ( $1\frac{1}{2}$  per cent), Italy ( $1\frac{1}{2}$  per cent), India ( $2\frac{1}{2}$  per cent), Holland ( $1\frac{1}{2}$  per cent). The sources of the statistics of prices are the *United States Bulletin of the Bureau of Labor*, *Wholesale Prices in Canada*, *Journal of the Royal Statistical Society*, *Bulletin de la Statistique Générale de la France*, and *La Curva dei Prezzi Delle Merci in Italia, Negli Anni 1881-1909*.

T. The estimate for the rate of increase in the volume of trade is of course a very rough one, although it has involved more labor than those for all the other five magnitudes put together. It is found by averaging the rates of increase in railroad tons carried, railroad gross receipts, post office letters carried, post office gross receipts, imports and exports (corrected for rate of change in price level, simply by deducting 2 per cent, so as to refer to quantities rather than values), and shipping tonnage (entered and cleared with cargoes). These figures are based on data from the sources above mentioned. The statistics for the number of letters are for the following countries only: United States ( $7\frac{1}{2}$  per cent), Great Britain (3 per cent), Germany (6 per cent), France ( $2\frac{1}{2}$  per cent), Austria ( $4\frac{1}{2}$  per cent) and Hungary ( $4\frac{1}{2}$  per cent). The statistics for exports and imports include those for the United States (3 per cent), Canada (5 per cent), Great Britain (3 per cent), Germany (6 per cent), France (5 per cent), Austria-Hungary (2 per cent), Italy ( $4\frac{1}{2}$  per cent), Russia ( $\frac{1}{2}$  per cent), Holland ( $2\frac{1}{2}$  per cent), Belgium ( $3\frac{1}{2}$  per cent), Japan ( $6\frac{1}{2}$  per cent). The shipping tonnage of "other" countries in the next following table includes only Australia, British India and Uruguay. In the case of shipping tonnage under the head of "Continental Europe and Japan" the figures for Japan are lacking.

It will be seen that the figures roughly check each other but that there are some discrepancies. The percentage rates of growth of the two sides of the equation of exchange ought to be exactly equal. This is true of Great Britain where both  $MV + M'V'$  and  $PT$  are found to be increasing at the rate of  $4\frac{1}{2}$  per cent per annum. For Canada  $MV + M'V'$  is found to be increasing at the rate of 11 per cent and  $PT$ , only 9 per cent. For Germany the rates disagree more, being 5 per cent and  $8\frac{1}{2}$  per cent. For France the rate of increase of  $MV + M'V'$  cannot be definitely determined. It is an average of 1 per cent for  $MV$  and 11 per cent for  $M'V'$  and therefore lies between 1 per cent and 11 per cent, but we have no exact knowledge of the relative importance of  $MV$  and  $M'V'$ .

The table shows that deposits are increasing far more rapidly than money. This fact is of great significance, especially in reference to the future trend of prices.

The volume of trade is increasing at rates *less in all cases than deposits*. This is true of the four particular countries in the preceding table, as well as in the United States cited in the former table, and in the various parts of the world given in the table which follows. In all eight instances (United States, Canada, Great Britain, Germany, France, "English Speaking," "Continental Europe and Japan" and "Other Countries") trade ( $T$ ) is growing more slowly—usually much more slowly—than the use of checks ( $M'V'$ ). In all cases except Canada it ( $T$ ) is growing faster than money ( $M$ ) or than the circulation of money ( $MV$ ); but in all cases it is growing *more slowly* than the total use of circulating media ( $MV + M'V'$ ).<sup>4</sup>

In the following table<sup>5</sup> the whole gold-standard world is included, grouped into three great divisions selected because of differences in the relative use of checks and money. The first group, including "English speaking countries" (United States, Canada, Great Britain and Australia), makes a very extensive use of

<sup>4</sup>This is true unless we except the *uncorrected* figures for Germany, "Continental Europe and Japan" and "Other Countries" for all of which categories the figures fail to check each other up. When these figures are corrected to become mutually consistent, the rates of increase of  $T$  are found to be less than of  $MV + M'V'$  precisely as in the other cases. For the world as a whole the volume of trade has certainly increased less rapidly than the use of circulating media.

<sup>5</sup>The method of constructing this table is explained in the preceding footnote.

checks. The second, comprising "Continental Europe and Japan," has begun the use of checks, but is still far behind English speaking countries, while the third, "Other Countries" (principally India) makes as yet almost no use of checks. The first three columns, showing the money in the countries and the bank deposits, bring out the contrast at a glance.

Countries	Money in country <sup>1</sup>	Bank deposits <sup>2</sup>	Relative deposits $\frac{M'}{M}$	Recent Percentage Rates of Growth, per annum of:								
				Money	Deposits	Velocity of money	Activity of deposits	Price level	Volume of trade	Money expenditures	Check expenditures	Total expenditures
				$M$	$M'$	$V$	$V'$	$P$	$T$	$M'V'$	$M'V$	$M'V' + M'V$
												$PT$
English Speaking	4.8	26.0	5.4	3.5	8	$\frac{1}{2}$	0	$2\frac{1}{2}$	5	4	8	$7\frac{1}{2}$
Continental Europe and Japan	6.2	2.9	.5	2	8	0	1	2	6	2	9	4-6
Other countries	1.7	.3	.2	$\frac{1}{2}$	$9\frac{1}{2}$	0	0	2	8	$\frac{1}{2}$	$9\frac{1}{2}$ <sup>3</sup>	1-3
All gold standard countries	14.7	29.2	2.0	$7\frac{1}{2}$	8	$\frac{1}{2}$	0	2	$5\frac{1}{2}$	3	8	7

<sup>1</sup> In billions of dollars.

<sup>2</sup> Incomplete; in billions of dollars.

<sup>3</sup> In the absence of data for clearings, the rate of growth of  $M'V'$  is taken as equal to the percentage growth of deposits.

It will be noticed that the figures for "All gold standard countries" mutually verify each other, that is, the relative rate of increase of the left side of the equation ( $7\frac{1}{2}$  per cent) is approximately equal to the rate of increase on the right side ( $7\frac{1}{2}$  per cent). In the case of English speaking countries the agreement between the two sides of the equation is perfect, each showing a rate of increase of  $7\frac{1}{2}$  per cent. In the other two items in the table, however, there is a wide discrepancy between the two sides of the table. The results (for "Continental Europe and Japan") would seem to show a rate of increase in the left side of the equation of from  $\frac{1}{2}$  per cent to 6 per cent per annum and in the right side of 8 per cent. The discrepancy of "Other Countries" is still greater, the left side showing an increase of only from 1 per cent to  $3\frac{1}{2}$  per cent per annum, while the right side shows an increase of 10 per cent. I have no doubt that these discrepancies are due almost entirely to errors in  $T$ . As explained in the footnote to the first table, the rates of increase of  $T$  are taken as an

average of the rates of increase of railroad tons carried, railroad gross receipts, post-office gross receipts, imports and exports (quantities) and shipping tonnage. These items naturally show a great rate of increase in countries where the railway, the post office and the steamship have not been in use long enough to have approached as yet their full development. Like most young organisms they grow especially fast and consequently are not good indications of *T*. The growth of the railroads is not a good indication of the volume of trade for countries like India, though it may be a fairly good index for the volume of trade for the United States, Great Britain and Europe. In countries where these inventions are now being introduced the rate of growth represents chiefly the development of these particular inventions, and not simply the growth of business in general, while in the countries where the railroad, post office and steamship have already reached nearly their full development or maturity, their growth depends chiefly on the growth of business in general. In view of this consideration, the fact that the figures for the rates of growth of the volume of trade (*T*) are greater in "Continental Europe and Japan" than in "English Speaking Countries" and are still greater for "Other Countries" casts no discredit on the other figures of the table.

The figures for the United States which are included in the last table were worked out by the same rough method as for the other countries. The results in general agree fairly well with those obtained by the more exact method employed in the June article and summarized in the beginning of this article. This agreement increases our confidence in the other figures in the table.<sup>6</sup> The agreement is especially satisfactory for the chief magnitudes *MV*, *M'V'*, and *PT*.

<sup>6</sup>The full comparison of the figures for the United States calculated by the "rough" and "exact" methods is as follows in percentages:

	M	M'	V	V'	P	T	MV	M'V'	MV+M'V'	PT	$\frac{M'}{M}$
Rough	4%	10	$\frac{1}{2}$	-2	2%	6%	5	8	7%	9	5
Exact	4.2	7.3	0.7	2.0	3.5	5.3	5.0	9.5	9.1	9.1	2.8

The worst discrepancy is in *V'* the rate for which by the rough method shows a negative result. The latter is clearly an error and is probably due, in accordance with previous explanations, to the cumulative effect of two errors, one in the "rough" rate for *M'V'* (8 per cent) which is too small, and the other in the "rough" rate (10 per cent) for *M'*, which is too large.



If, now, the "exact" figures for the United States be substituted for the "rough" figures, the results for "English Speaking" and for "All gold standard countries" will become slightly changed. The changes which will thus be produced in the figures for "All gold standard countries" will be seen in the second line of the following table. The first line repeats the original calculations given above, while the third line gives the final estimates obtained by making arbitrary mutual adjustment.<sup>7</sup> No figure for any of the primary magnitudes,  $M$ ,  $M'$ ,  $V$ ,  $V'$ ,  $P$ ,  $T$ , has been altered by more than one half per cent.

THREE APPROXIMATIONS FOR PERCENTAGES, "ALL GOLD STANDARD COUNTRIES."

	M	M'	V	V'	P	T	MV	M'V'	$\frac{MV}{M'V'}$	PT	$\frac{M'}{M}$
Original calculation	2½	8	½	0	2	5½	3	8	7	7½	5½
Revised by "United States exact"	2½	7	½	2	2½	5	3	9	8	7½	4½
Finally adjusted	2½	6½	½	1½	2½	3½	3	8	7	7	4

The last line contains the final conclusions as to the growth of those world conditions directly affecting the price level. We see that world prices have been rising about 2½ per cent per annum; and that this is due to the fact that the total circulation of money and checks ( $MV + M'V'$ ) grew 2½ per cent faster than the

<sup>7</sup> In making these adjustments I have exercised my own discretion and taken account of other considerations besides merely making both sides agree. In particular, I have adjusted  $T$  downward because, as already indicated, the  $T$  rates are in general exaggerated.

In the United States the volume of trade ( $T$ ) is increasing at the rate of 5.3 per cent per annum; and since our population is increasing at the rate of 1½ per cent per annum, the increase *per capita* is only about 4 per cent. It does not seem likely that the increase *per capita* in many other lands would be greater than in the United States, while the increase in population is less, being only 1 per cent. On this basis we would conclude that the rate for the world would not be over 5 per cent and may be considerably less. The  $T$  rates as first worked out averaged 5½ per cent. But these included a rate for the United States, reached by the rough method employed for other countries. This roughly calculated rate for the United States was 6½ per cent, whereas the true rate, according to the far more trustworthy data previously employed was 5.3 per cent. Using this more exact figure in place of 6½ per cent, we found the average rate for the world to be 5 per cent in place of 5½

volume of trade ( $T$ ), the growth of circulating media being 7 per cent per annum and the growth of trade being only  $4\frac{1}{2}$  per cent per annum. The 7 per cent growth of circulating media was, in turn, due principally to the growth in check circulation ( $M'V$ ) which advanced 8 per cent per annum. This 8 per cent growth in check circulation was, in turn, due chiefly to the growth of deposits ( $M$ ) which advanced  $6\frac{1}{2}$  per cent. Of this  $6\frac{1}{2}$  per cent growth of deposits, in turn  $2\frac{1}{2}$  per cent was due to the increase of money ( $M$ ) and the balance, 4 per cent, to the outstripping of money by deposits, i.e., to the growth of *relative* deposits  $\frac{M'}{M}$ .

#### *Forecast for the Gold Standard World*

As previously stated and elsewhere emphasized,<sup>8</sup>  $M'$ , the volume of deposits subject to check, tends to keep pace with  $M$ , the quantity of money in circulation. It follows that a part of the increase in  $M'$  is due to the increase in  $M$ . Consequently also a part of the increase in  $M'V$  is due to the increase in  $M$ . It is well to bear this in mind, for the principal importance of the increase in gold production lies in its effect on  $M'$ . The mere increase in  $M$  alone would be relatively unimportant. If  $M$ , instead of increasing  $2\frac{1}{2}$  per cent, had not increased at all,  $M'$  would not have increased  $6\frac{1}{2}$  per cent but only 4 per cent. In that case there would have been no increase in the price level. So also, if in the future  $M$  should suddenly cease increasing while  $M'$  relatively to

per cent. But even this does not sufficiently allow for the exaggeration in our index of  $T$ , since that exaggeration probably applies to all other countries, unless possibly England and France, where the post office and railway business has not been greatly extended except in specific response to the general growth of business. In both these countries the  $T$  rate is calculated at 3 per cent. But in all other countries the results are doubtless exaggerations. We have already presented *internal evidence* of this in the great discrepancy between the estimates in the two sides of the equations, in "Continental Europe and Japan" and in "Other Countries." In the former the excess of the side of the equation on which  $T$  is found is 2 per cent to 4 per cent, while in the latter it is from 7 per cent to 9 per cent. In the United States the excess was  $1\frac{1}{2}$  per cent. Taking all these considerations into account, I feel safe, when making the final adjustments, in trimming down the  $T$  rate from 5 to  $4\frac{1}{2}$  per cent. It is believed that the final estimate is in general correct within less than one point (one per cent of growth). This is not a high degree of accuracy but it represents, I believe, a better basis for forecasting the future than any which has hitherto been employed.

<sup>8</sup> See *The Purchasing Power of Money*, chs. 3, 8.

$M$  should continue the same rate of increase and  $T$  also should increase at the same rate, the price level would remain stationary.

For reasons to be given I believe it is fairly safe to say: (1) that  $M'$  will, for many years, increase as fast relatively to  $M$  as it has in the past, (2) that  $M$ ,  $V$ , and  $V'$  will increase at least to some extent (even if only as fast as population) and (3) that  $T$  will not increase faster than at present. If these conclusions are correct it follows that the price level must rise in the future.

We shall examine the prospects in detail for each of the magnitudes  $M$ ,  $M'$ ,  $V$ ,  $V'$ , and  $T$ .

$M$ . The principal cause in recent years for the increase of money in circulation has been the great output of gold. This output has been a remarkably steady percentage ( $4\frac{1}{2}$ ) of the world's stock of gold.<sup>9</sup> Analogy would lead us to expect a continuance of this rate in the future. But analogy is an unsafe guide. Some gold mining experts like de Launay add their testimony in favor of continuation. Others, like Mr. George E. Roberts, Director of the United States Mint, think the chances are that the maximum will be reached in a few years. There are always, of course, chances of new discoveries or methods of production and chances of exhaustion of mines, although the exhaustion of mines is readily foreseen several years in advance, while the discovery of new mines or methods can never be definitely foreseen. Leaving out of account the chance of great discoveries which always exists, the output is fairly sure to remain great even if it ceases to increase or to increase at the present rate.

There is, of course, a tendency for the increased gold production automatically to check itself, since the increase in wages and other expenses which are caused by the increased quantity of money, makes the working of the mines themselves more expensive. Director Roberts, who is one of the best informed men in the world on this subject, in his 1911 report, states:

"It has been a theory of writers on the subject that the rise of commodities and wages would automatically check the production of gold, thus providing its own corrective, but the gold-mining industry furnishes an illustration of how invention, organization, and the use of capital are able to accomplish a reduction in costs when every factor in the calculation shows an advancing tendency. The cost of handling ore and extracting gold in the Transvaal mines per ton of ore treated has steadily declined and made a new low record in 1910."

. . . . . "While it is not likely that the Rand will show an appreciable

<sup>9</sup> *Moody's Magazine*, March, 1912.

decrease for a good many years to come, it is probably not far from the maximum output. There has been no gain in the world's production for some years except that made by the Rand."<sup>10</sup>

We conclude then that, so far as the future production of gold is concerned, it is not safe to predict any great future increase although it would be still less safe<sup>11</sup> to predict a decrease. It seems safe only to say that the production of gold will not decrease fast nor suddenly and that whether or not its production decreases at all, gold will for many years still be produced in sufficient quantities to create a net addition to the world's money and bank reserves of, let us say, at least 2 per cent per annum, or one half per cent less than the present rate. It seems unlikely that the rate of increase of money stock will fall much below this.

The fact that the gold standard world is now so large tends of course to lessen the effect of fresh supplies of money, but these supplies are also large while bank deposits are becoming a more and more dominant feature. There was a time when the Orient acted as a "sink" of the precious metals and to some extent it does so still. India has been yoked to the gold standard since 1893-1898 and this fact has doubtless mitigated the rise of prices which the world has experienced since 1896. What Professor J. Stanley Jevons said of India, when gold and silver countries were united through bimetallism, holds true today when India is linked to gold standard countries through the "gold exchange standard." He said:

"Asia, then, is the great reservoir and sink of the precious metals. It has saved us from a commercial revolution and taken off our hands many millions of bullion which would be worse than useless here. And from the earliest historical ages it has stood in a similar relation to Europe. In the Middle Ages it relieved Europe of the excess of Spanish-American treasure, just as it now relieves it of the excess of Australian treasure."<sup>12</sup>

According to the Director of the Mint, for the eleven years 1900-1910, India absorbed 434 millions of gold and, for the British fiscal year ending March 31, 1911, the net imports were 90 million dollars, or about one quarter of the world product after the industrial consumption was provided for. A correspondent of the Director of the Mint writes:

<sup>10</sup> *Report of the Director of the Mint for 1911*, p. 67.

<sup>11</sup> How hazardous it is to set a limit to gold discovery is well illustrated by the prediction of the Austrian geologist, Suess, fifteen years ago, that gold production had reached its climax and would decline!

<sup>12</sup> *Investigations in Currency and Finance* (London, 1884), p. 137.

"The net import of gold into India for the month of February, 1912, is a fresh record and amounts to the substantial sum of £5,174,600. This total is more than double that for February, 1911, and represents nearly one-sixth of the whole Rand output for 1911. The bulk of this large sum was imported in the form of sovereigns which were available for circulation if the country so desired."

Yet India has not prevented the world rise of prices and she has herself shared this rise, at the rate of about  $2\frac{1}{2}$  per cent per annum, as the statistics of Atkinson show. Even if China should follow the example of India and introduce the gold exchange standard, the effect in steadying prices would probably not be great; for China, like India, though large in population, is small in its use of money per capita. Excepting China there now remains no important country which can relieve the present gold standard world of redundant gold. Nor is gold the only source of addition to monetary stock. If the plan of the National Monetary Commission should be adopted or, for that matter, any other plan likely to be considered for improving our currency, the result must inevitably be to inflate the currency. It would also get rid of our present uneconomical use of bank reserves and substitute a system which would virtually release reserves now locked up. The tendency of all these changes (however desirable on other grounds) would be to raise prices. When, therefore, we consider all the possibilities—the chances of new discoveries of gold or of further economies in gold mining, the certainty of a continuance of an enormous annual extraction of ore actually "in sight," the chances of increases in paper money and subsidiary coins—we may well feel confident that gold production will not slacken enough to bring the upward movement of prices to a standstill. In order to arrest this upward movement of prices, the gold production would practically need to cease altogether so as to make the money in circulation ( $M$ ) remain stationary; for the figures given show that  $M$  is now increasing at the rate of  $2\frac{1}{2}$  per cent which is the same rate as  $P$  is increasing.

V. Next let us consider the prospects for the velocity of circulation of money. We have assumed that the velocity of circulation of money in the world will only feebly increase, this assumption being based on the calculation made above for the United States. It is safe to say that the rate of increase could not be much lower than that assigned and it may be somewhat higher. In fact there is much to be said in favor of the latter view. The extension of rapid transportation will tend powerfully in this di-

rection especially in slow and backward countries like India. Again the extension of banking tends in the same direction. Where banking does not exist, money is hoarded, *i.e.*, circulates slowly. Where banking is introduced, money is deposited and finds its way into circulation. No one will, I think, deny that, for many reasons, hoarding is constantly on the decrease, and a decrease in hoarding means an increase in velocity of circulation. It was not long ago when French people stowed away large sums of money in stockings and other domestic receptacles. These were their chief savings banks, and savings meant hoards. But today all money not needed for immediate use is generally deposited in some sort of bank, whether a savings bank or an ordinary bank of deposit, and is thence returned by that bank into circulation or used as a reserve for several times its value in deposits subject to check. In either case the effect is virtually to inflate the currency.

We may, I believe, expect such a release of oriental hoards in the future. The astonishing lengths to which hoarding is now carried in Egypt and India are emphasized by Director Roberts of the United States Mint. He says:

"The Egyptian situation is somewhat like that of India. The country is on a gold basis, and for 30 years has been steadily taking gold in the settlement of its trade balances. The high price of cotton in recent years and the increasing production of the country explains the trade balances, but there is some mystery about the way the gold disappears from view. It does not enter into bank stocks, and it is difficult to understand how a country of its size and population and in which the masses of the people are so poor can absorb so much gold coin. . . . Some light is shed upon the situation by the following statement in an address by Lord Cromer, made in London in 1907:

'A little while ago I heard of an Egyptian gentleman who died leaving a fortune of £80,000, the whole of which was in gold coin in his cellars. Then, again, I heard of a substantial yeoman who bought a property for £25,000. Half an hour after the contract was signed he appeared with a train of donkeys bearing on their backs the money, which had been buried in his garden. I hear that on the occasion of a fire in a provincial town no less than £5,000 was found hidden in earthen pots. I could multiply instances of this sort. There can be no doubt that the practice of hoarding is carried on to an excessive degree.' " (*The Statist*, Nov. 2.)

The amount of such hoards has been emphasized by Director Roberts of the United States Mint as evidence that they provide a future sink for gold and thus tend to absorb gold, and perhaps arrest the rise of prices. There can be no doubt that oriental hoarding will continue for years to afford an outlet for redundant

gold, and so tend to mitigate the resultant rise in prices. But there is no reason to think that such a cause can stop the rise. The weakness of such an argument lies in the tacit assumption that the influence of hoarding will be more powerful in the future than in the past, whereas the opposite is likely to be the case; and in the past it has not been sufficient to prevent a rapid rise of prices. In the future we must reckon with a lessening tendency to hoard and an increasing tendency to gradually *unload* ancient hoards. Just as, with the introduction of banking, hoarding long ago went out of vogue in England, and more recently in France, so it must surely, if slowly, go out of vogue in India and Egypt. The transformation will take place as these countries gradually introduce occidental banking. Already there is a rapid growth of banking in these countries. Thus in Egypt postal savings bank deposits increased from \$190,000 in 1901 to \$2,250,000 in 1910, and in British India, from \$35,000,000 in 1899 to \$51,000,000 in 1910.<sup>13</sup> Similarly the *Statistical Abstract*, relating to British India (p. 97) shows that deposits in twenty-one banks have more than doubled in nine years, reaching \$180,000,000 in 1909.

The same principle applies to oriental hoards in the form of ornaments. Centuries ago Englishmen used to put part of their hoards into "plate" which could be reconverted into coin if emergency required. With the advent of banking devices such a custom has long since disappeared. It is to be expected that little by little the same process will turn part of the oriental hoards of ornaments into monetary use. Thus, as a consequence of the introduction of western civilization into the Orient, we have the prospect of further additions to the effective use of the world's gold, a further virtual inflation of the currency.

Director Roberts says:<sup>14</sup>

"There is an undoubted tendency in all countries to use banks more than formerly, and it is probable that the stock of gold in banks has been recruited not only from new production but to some extent from gold heretofore held in private hoards and out of use. In every country the younger generation to whom these hoards descend is likely to put them to some use."

Similarly government hoards and even bank hoards seem likely in the future to decline or at any rate to cease being accumulated. A decade and more ago gold was so scarce as compared with the

<sup>13</sup> *United States Comptroller's Report*, for 1911.

<sup>14</sup> *Ibid.*, p. 61.



demands made upon it that a large part of the early additions to the world's stock were absorbed to strengthen weak reserves and government hoards and to replace silver and paper. About a billion of gold has been accumulated by the United States in the last ten years and about half a billion by Russia and France. Moreover, Japan, Argentina, Brazil and Mexico have absorbed much gold. India, Mexico, the Philippines, Panama and the Straits Settlements have made demands on gold to sustain their "gold exchange standard." An economist of note writes:

"The effect in raising prices I think, however, would have been vastly greater than it has been had not the United States, Russia and Egypt been hoarding gold and thus employing it uneconomically."

These demands on gold have now been so far satisfied that in the future any addition to the world's stock will be freer to act on prices both as a circulating medium and as bank reserves. This means that what may be called the "virtual velocity of circulation" of money will be increased.

*M'*. We come next to the volume of deposits subject to check (*M'*) and their velocity of circulation or "activity" (*V'*). These together constitute the use of checks (*M'V'*). Perhaps no factor has been so greatly neglected or underestimated in importance as the use of checks. When once it is recognized that deposits subject to check are a form of currency similar in function to bank notes,—nay, are today the *chief* form, the discussion of the price level will assume a new phase.

As was shown in my June article, in the United States the volume of check transactions forms 92 per cent of all transactions. Probably something like this ratio obtains in Canada and England. Outside of English speaking lands, however, the ratio is undoubtedly much less. If we could assume that the volume of check transactions actually maintained a constant ratio to that of money transactions, the circulation of checks would not then have to be reckoned with as an independent factor. Some day in the future, when the use of checks has grown up to its work, it would not be strange if the ratio of checks to money should remain fairly constant. At present, however, we are passing through a long transition period during which the device of using checks instead of money is being extended with prodigious rapidity. This is the dominant feature of the present situation and forms the chief basis of the forecast here attempted. All nations—even those which have used checks for generations—are making a continually larger

use of checks relatively to money. As the last table shows, the use of banking devices is increasing much more rapidly than the volume of money. The volume of deposits is increasing at the rate of  $6\frac{1}{2}$  per cent per annum. Even in England where checks have been used for so long a time, the volume of deposits is still increasing at the rate of  $3\frac{1}{2}$  per cent per annum; in the United States, at 7.3 per cent; in Canada, at 12 per cent; and in Australia, at  $3\frac{1}{2}$  per cent. These are English speaking lands, in which, if anywhere, the use of checks should have approached its limit. No such approach is observable in the United States or Canada and the data for Australia are too meager to be considered representative.

In "Continental Europe and Japan" there is certainly no tendency to decrease. Here in the next few decades is a vast region for the extension of deposit banking. It would not be surprising if, in Germany and other continental countries, the use of checks should reach a stage when every business man would begin to realize that he must employ them. Then the use of checks would increase at an even more rapid rate than at present. At present the rate of increase in France is 7 per cent, in Germany 13 per cent, Holland 9 per cent, Denmark 10 per cent, Norway 8 per cent, Sweden  $5\frac{1}{2}$  per cent, Switzerland 5 per cent, Russia  $2\frac{1}{2}$  per cent, Japan 10 per cent, the Austro-Hungarian Bank 17 per cent. In backward India where deposit banking has only just begun, the rate of increase is 9 per cent, in Mexico 11 per cent. Should only the present rate of increase be maintained, while the rates in English speaking lands should slacken, the average rate for the world would not necessarily or even probably decline. At present the deposit currency of the United States far exceeds that of other countries, but the deposit currency of Continental Europe and Japan will cut more and more of a figure, and by the time—perhaps a generation hence—when their rate of increase begins to slacken, India and other of the (now) backward countries in the third group of the last table will then need to be reckoned with. The present relative positions of these three groups are shown roughly by the ratio of deposits to money in the country as given in the last table but one. In the English speaking group deposits are almost five times the money in the country. In the next group—Continental Europe and Japan—on the other hand, the figures show that deposits are only half as great as the money, although this ratio may be too small if, as is likely, the statistics

of deposits are more defective than those of money. The third group shows money to be only one fifth of the deposits although there is the same probability that this ratio is too small also. Unfortunately neither the figures for money nor the figures for deposits which were used in forming these ratios, exactly represent the  $M$  and  $M'$  of our table. The money in the country includes money in banks and government vaults, while the deposits include many deposits which are not subject to check. Yet in a general way we may believe that the relative importance of money in circulation and deposits subject to check is approximately represented in the table.<sup>15</sup> At any rate the obvious lesson of the figures is a prodigiously rapid expansion of deposit-banking throughout the world.

$V'$ . We come next to the activity of deposits subject to check. In the United States this has shown a progressive tendency to increase. As the factors—concentration of population in cities, rapid transportation, etc.—which tend to increase  $V'$  are constantly increasing, we may expect this factor to increase for other countries also. That concentration of population in cities is a very powerful influence in accelerating the activity of bank accounts is shown clearly by the figures of Pierre des Essars and myself. The activity of deposits varies almost exactly with the size of the cities and the range of variation is surprisingly great. This exceeds 100 times a year in Paris, Berlin and Brussels, but is only 16 times a year in New Haven, four times a year in Athens, Greece, and only once a year in Santa Barbara, California.<sup>16</sup>

These results accord with the fact that the velocity of circulation in the United States has increased very substantially during the last fifteen years—from 37 times a year to 50 times a year.

Finally, we have the testimony of the statistics of clearing-houses. The rate at which these increase is used as a rough indication of the rate at which the use of checks ( $M'V'$ ) increases. As the figures in our tables show, clearings usually show a more rapid rate of increase than deposits. This indicates that the use


<sup>15</sup> In the United States the money in circulation is only about half of the money in the country, and the deposits subject to check are likewise about half, so that the true ratio, 4.7, of  $M'$  to  $M$ , turns out to be exactly the same as the ratio of deposits to money in the country as calculated by the rough method used in the table.

<sup>16</sup> See "La vitesse de la circulation," in *Journal de la Société de Statistique de Paris*, April 1895, p. 148, and *The Purchasing Power of Money*, p. 87.


of checks is increasing faster than the deposits against which they are drawn, which means that the activity of these deposits is increasing. It is true that this is not definitely indicated by the figures for all countries; but, judging from the facts in the United States, it is probable that the raw figures for the growth of deposits overstate the rate of growth of deposits subject to check, while those for clearings understate the rate of growth of the use of checks.

*T*. Finally we come to the volume of trade. This is the one factor which acts to restrain the rise of prices. Doubtless the volume of trade will continue to increase in the future, but there seems to be no evidence to lead to the conclusion that it will increase at a more rapid rate in the future than at the present time; and no evidence that it will, as long as the present development of banking continues, outstrip the expansion of media of exchange. On the contrary, there is some reason to believe that trade, while it will continue to expand, will expand more slowly. The fuller occupation of our lands and the decrease in the rate of growth of our population, which is partly a consequence of this occupation and partly a consequence of the voluntary decrease in the birth-rate, should tend to curb the rate of increase. Certain inventions pertaining to transportation will doubtless cause long distance and international trade to increase greatly, but such trade constitutes only the outer fringe of the great mass of trade. For the United States, for instance, the whole foreign trade is less than one per cent of the internal trade. The great bulk of trade consists of *local* transactions. Local trade is affected by transportation but not affected so greatly as long distance trade. Thus rapid transportation has caused a prodigious increase in the trade between the antipodes, a less increase in the trade between the states of the United States and a still less increase in the trade between individuals in the same town. Improvements in transportation always help trade, but the connection between transportation and trade is a loose one so that probably the growth of transportation always outstrips the growth of trade.

After a careful weighing of all the evidence available I have been unable to escape the conclusion that, in the race between  $MV + M'V'$ , the purchasing power of both money and deposits, on the one hand, and *T*, the volume of trade, on the other, the outlook is that the former will continue for many years to outstrip the latter.

The weight  symbolizing a purse, represents  $M$ , the money in circulation.

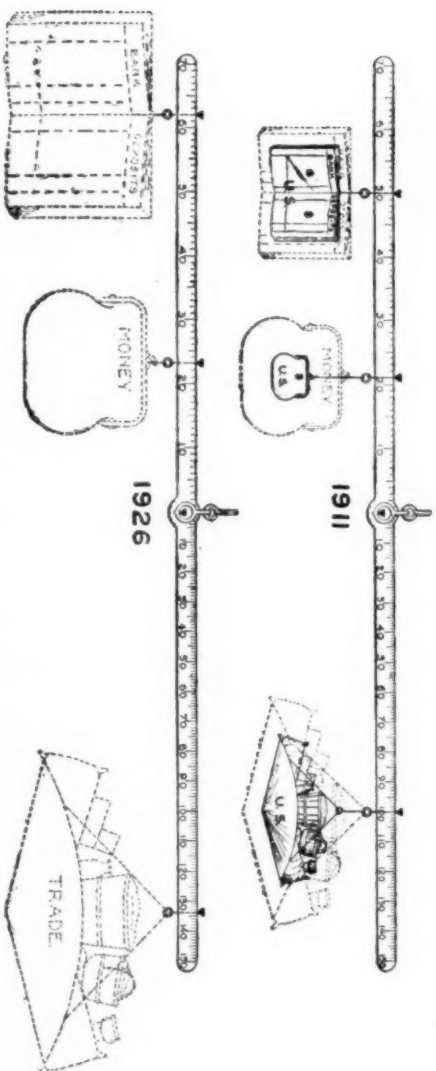
The leverage of this purse, or its distance from the fulcrum, represents  $V$ , the velocity of circulation of money.

The weight  symbolizing a bank book, represents  $M'$ , the bank deposits against which checks are drawn.

The leverage of this bank book represents  $V'$ , the velocity of circulation ("activity") of these deposits.

The weight  symbolizing a grocer's tray, represents  $T$ , the volume of trade.

The leverage of this tray represents  $P$ , the index number of prices measured as a percentage of the prices of 1911



Hypothetical Representation of the Equation of Exchange for the Gold Standard World

If this conclusion is correct, then prices must, on the average, continue to rise.

In all the above discussion we have considered only the *rates* of increase of these factors, and not their absolute magnitudes. As has been indicated, this was done because as yet data are lacking by which to make any reliable estimate for the various magnitudes in the world's equation of exchange. In order, however, to provide some sort of mental picture of the changes in the various magnitudes, the accompanying illustrative table and diagram are given.<sup>17</sup> The figure used for  $M$  in 1911 is probably approximately correct and that for  $M'$  correct within a few billions of dollars. The figures for  $V$  and  $V'$  are simply the figures for the velocities of circulation in the United States. That they are representative of the world at large is not and could not be claimed. We know nothing of the absolute magnitude of these factors in the world as a whole.

Assuming these hypothetical values for the six magnitudes in the world equation of exchange for 1911, we can picture what their values will grow to in fifteen years under the two hypotheses represented as "probable" and "conservative." The "probable" hypothesis indicates what will happen if all the factors grow, as recent experience and present prospects indicate to be most probable. The "conservative" hypothesis indicates what will happen if the growth of the four price-raising factors,  $M$ ,  $M'$ ,  $V$ ,  $V'$ , is *as slow as could reasonably be assumed*, while, at the same time, the growth of the one price-restraining factor,  $T$ , is *as rapid as could reasonably be assumed*.

The rates selected for the "probable" case are those indicated by recent experience except (1) that the rate for  $M$  is reduced from  $2\frac{1}{2}$  to 2 to provide for the probable gradual falling off in the rate of increase of money and (2) that, as a consequence of this reduction in  $M$ , there will be an equal reduction in  $M'$  from  $6\frac{1}{2}$  to 6. It will be seen, therefore, that, although I have called these figures "probable" as distinguished from the others which are called "conservative," the former might perhaps be called conservative and the latter, ultra-conservative. The conservative character of the "probable" estimates is illustrated by the figures for deposits. The rate of growth of bank deposits which is called

<sup>17</sup> The diagram is constructed on the same principles as those in the June article and *The Purchasing Power of Money*.

"probable" is less than the rate (7.3) in the United States. This is due chiefly to the low rate (3 per cent) in England. But before fifteen years are up "Continental Europe and Japan" will cut so large a figure in the average that the low rate in England will have less weight and the high rates of Germany and other countries, now relatively insignificant in their volume of deposits, will have more weight. The result may well be that the world's average rate of increase of deposits will be greater in the future even if the rates in some or all individual countries should become less.

HYPOTHETICAL FIGURES ILLUSTRATING FUTURE GROWTH  
(FIGURES FOR THE ABSOLUTE SIZE OF  $M$ ,  $M'$ , AND  $T$  ARE IN BILLIONS OF DOLLARS)

	Money in circulation	Deposits subject to check	Velocity of money	Velocity of deposits	Price level	Volume of trade	Money expendi- tures	Check expendi- tures	Total expendi- tures	Relative deposits <sup>3</sup>	Relative money expendi- tures <sup>4</sup>
	$M$	$M'$	$V$	$V'$	$P$	$T$	$MV$	$M'V'$	$MV + M'V'$	$\frac{M'}{M}$	$\frac{MV}{MV + M'V'}$
Assumed for 1911	12	15	21	50	1.00	1000	250	750	1000	1½	25
Future rates of growth	Probable <sup>1</sup>	2	6	½	1½	2	4½				
	Conserva- tive <sup>2</sup>	1½	5	0	1	5					
Results in 15 years	Probable <sup>1</sup>	16	36	23	62	1.34	1940	370	2230	2½	14
	Conserva- tive <sup>2</sup>	15	31	21	58	1.02	2080	315	1800	2	15

<sup>1</sup> By "probable" is meant: "In case all five price-determining factors grow as recent experience and present prospects indicate to be most probable."

<sup>2</sup> By "conservative" is meant: "In case all price-raising factors ( $M$ ,  $M'$ ,  $V$ ,  $V'$ ) grow as slowly as could reasonably be assumed and the price-restraining factor ( $T$ ) grows as fast as could reasonably be assumed."

<sup>3</sup> Relatively to money in circulation.

<sup>4</sup> As percentage of total expenditures.

The rates selected for the "conservative" case are for  $M$ ,  $V$  and  $V'$  reduced by half a point from those of the "probable" case, that for  $M'$  reduced one point (*i.e.*, reduced half a point because of the reduction of a half point in the  $M$  rate and another half a point on its own account) and that for  $T$  raised half a point.

The "probable" figures illustrate, what has already been implied, that the outlook is for a rise of prices of 2 per cent per annum or from an assumed 100 per cent in 1911 to 134 per cent in 1926, *i.e.* a rise of one third in the next fifteen years, while on the most



conservative basis the price level will not fall. Humanly speaking, I believe it is certain that prices will not show a downward trend in the next fifteen years. There seems to me to be less than an even chance that any *one* of the five factors should be as extreme as supposed in the "conservative" case. Much less is it likely that they all should be. But even if there were an even chance (*i.e.*, a chance of  $\frac{1}{2}$ ) that each of these factors, taken by itself, should deviate from the "probable" as much as indicated in the "conservative" case, the chance that *all five should do so at the same time* would be extremely small, *viz.*,  $(\frac{1}{2})^5$  or one chance in 32. The true chance is probably considerably less than this. On the basis of the theory of probability, I am inclined to believe that the chance that prices will not, in general, rise during the next fifteen years is less than one in one hundred.<sup>18</sup>

"The reasons why the chance is so small are three. First and foremost is the fact above mentioned that among the five variables affecting the price level, the chance of a conspiracy, so to speak, among them so that they shall all work in the same direction at the same time is extremely small. One may "trust to luck" that if some one price-raising factor such as *M* should through a sudden cessation of gold mining be greatly slackened, some one or more of the other four factors are almost sure to work a partial or complete compensation. This will not be mysterious to anyone familiar with the theory of chances. It is well known that in tossing five coins the chance of all five coming up heads is only one in thirty-two.

The second reason is that the steadiness in growth of the various factors in the past makes it extremely improbable that the variation in any one, or at any rate, any considerable number of them, will be very great. The third is the increasing dominance of checks as compared with money which of itself might, paradoxically, cause a rise of prices even though, individually, both the rates of growth of money and of deposits subject to check should happen to fall.

It is possible on the theory of probabilities and certain assumptions to calculate the chances that the five magnitudes determining the price level may change in such a manner as to prevent a rise in prices. This calculation is more complicated than the mere raising of a fraction to a power as supposed above. It must take account of all combinations of chances which might produce the result under discussion. These include the chances that a deviation in one or more elements may be so great as not to require the aid of all or even of any of the other elements. To perform this calculation we make two assumptions, (1) that the ordinary law of probability or frequency applies to the present case, and (2) that the "probable deviation" is in all cases  $\frac{1}{2}$  of a point in the tables. The first supposition seems admissible, and even if it should not exactly apply, the result would not be materially affected. The second supposition—that the probable deviation is  $\frac{1}{2}$ —is of course merely a matter of opinion; but it greatly overstates, in my

The table illustrates clearly how the increasing dominance of deposit currency will tend to push prices upward even if the growth in the volume of money should diminish by  $\frac{1}{2}$ , i.e., by 20 per cent, and this in spite of the reduction of  $\frac{1}{2}$  in the rate of growth of deposits which would follow from the reduction of that amount in the growth of money. In other words, in spite of the fact that the figures both for  $M$  and for  $\frac{M'}{M}$  are assumed to be  $\frac{1}{2}$  a point lower in the future than in the past, the resulting rise of prices is the same in the future as in the past, owing simply to the increasing dominance of  $M'$  in controlling the result. This increasing importance of  $M'$  is illustrated by the increase in  $\frac{M'}{M}$  which is represented as changing in the next 15 years from a supposed

opinion, the liability to fluctuation and therefore strengthens the conclusions which follow. By "probable deviation" in this case is, of course, meant the probable change of rates of growth from their present figures to those of the next fifteen years. To say, for instance, that the probable deviation of  $M$  is  $\frac{1}{2}$  means: "It is as likely as not that the annual rate of growth of  $M$  in the next fifteen years will vary from that recently experienced by  $\frac{1}{2}$ ." This implies, for instance, that as likely as not the average rate of new gold coinage combined with other additions to the world's stock of money in the next fifteen years will be 20 per cent greater or less than it is now. We have no good statistics by which to test these purely conjectural figures. As already noted, the annual output of gold during recent years has maintained a remarkably steady relation to the estimated stock of gold in the world. If we take the various available estimates of the total money in the world (in the years 1860, 1883, 1890, 1896, 1910) and compare with them the average annual yearly production of gold in the few years immediately preceding and succeeding these dates, we find that the gold production amounted in these respective years to approximately 2 per cent,  $1\frac{1}{4}$  per cent, 1 per cent, 2 per cent and  $3\frac{1}{2}$  per cent. The "probable deviation" of any one of these figures from the mean is by the usual formula, about .6. The variability as between immediately successive periods of fifteen years each would be presumably less. For bank deposits no uniform series of statistics are available for a long series of years. The best we can do is to take the "individual deposits" in the United States for the last 15 years and the 15 years immediately preceding and to compare them with the increase in money in circulation outside of banks and United States government vaults. In this way it is found that the annual rate of increase of deposits relatively to money is exactly 3 per cent in both periods. (The money increased 1 per cent per annum in the first period and  $8\frac{1}{2}$  per cent in the second; while absolute deposits increased 4 per cent and  $11\frac{1}{2}$  per cent respectively.) For the volume of trade we likewise have no extended and uniform figures to indicate variability. We only have the rough calculation of Professor Kemmerer beginning in 1879 and extending

1 $\frac{1}{4}$  to a supposed 2 $\frac{1}{4}$ . The last column shows substantially the same tendency in a different form. The relative use of money is represented as declining from a supposed 25 per cent to 15 per cent of the total use of circulating media. Even this reduced ratio, 15 per cent, would still be double the present ratio in the United States.

In view of all the facts, it would not seem strange if the rise in prices should continue in the future for at least a generation. This does not mean, of course, that a rise will occur in every individual year. On the contrary, the upward movement, for reasons elsewhere given,<sup>19</sup> is likely to be interrupted every decade or so by a crisis, like that of 1907. As stated in last year's article, such a crisis seems likely to incubate in a few years from the present. It is true that recent liquidations due to business men retrenching (through fear of a drastic enforcement of the Sherman law, etc., and because of the temporary recession of prices) have nearly restored normal conditions in the United States. But this liquidation has postponed rather than averted the expected crisis, and is, moreover, confined to the United States. In Canada and Germany we hear of a distended condition of credit. A restoration of

to 1908. This lacks only one year of making two periods of fifteen years each. Dividing this period into two equal parts we find the rate of growth of trade in the United States on the basis of these figures is 4 $\frac{1}{2}$  per cent per annum in the first period and 5 per cent in the second. (See his *Money and Prices*, p. 131.) These stray straws indicate, although far from conclusively, that the assumption of half a point more or less as the "probable deviation" is conservative rather than excessive for the world's growth of money and deposits. As to their velocities I feel reasonably certain, on the basis of the considerations already given, that their rate of increase will not appreciably slacken.

The result of the calculations is: the chances that the trend of prices for the next fifteen years will not be upward are *less than one in one hundred*. The correctness of this conclusion does not depend on any assumption of accuracy in the rates of growth used in the table. Even if the true rate of growth of *M* should be something different from the estimate here made, the same reasoning would apply. *Whatever* is the true rate of growth, that rate must fall by  $\frac{1}{2}$  in order to affect the price level by  $\frac{1}{2}$  and the same applies to *T*, etc. The correctness of the conclusion does depend, however, on the assumption that the "probable deviations" used are conservative. Even if statistical research should prove that they are not always conservative, nevertheless any other reasonable assumption could still show that the chance of a fall in price is very slight indeed.

<sup>19</sup> *The Purchasing Power of Money*, ch. 4.

the steady upward movement in prices is pretty sure to mean a boom, and a boom is the incubation period for a crisis.

No upper limit is assigned to the possible rate of rise of prices, for the reason that we can never know when new and rich mines will be discovered or when someone will find a paying method of extracting gold from the Southern clays or even from sea water.

We conclude then that prices are almost sure to continue to rise in the next decade or two, probably as fast on the average as 2 per cent per annum.

It is interesting to observe that the United States now has the dominant role in the world drama which these statistics aim to picture. This is especially true in respect to deposits subject to check. We know that the total individual deposits in the United States are sixteen billions, and those subject to check are eight billions. In all other countries the total deposits reported are only about thirteen billions. If it be true that, in these countries also, the deposits subject to check constitute about half of the total deposits, there are as yet among these other nations only about six and one half billions of deposits subject to check. The fact that the United States deposits loom up as so large a part of the world's deposits need not surprise us when we realize how much higher the American price level is than that of other and especially oriental countries and how much more money we have per capita. India, for instance, with its teeming millions, has only 67 cents per capita, while the United States has \$35 of which about half is in actual circulation. In addition we have a per capita of \$150 of deposits subject to check. The fact that prices in the United States and Canada have risen more rapidly than elsewhere is, in my opinion, chiefly due to the rapid rate at which deposits in these countries have increased.

As was indicated in the June article, the unequal advances in prices in different countries will, in general, tend toward mutual correction. This will imply changes in international trade. The relatively slight rise in England tends to make England attractive to purchasers and unattractive to sellers. The opposite is true of the United States, Canada and Germany. We may therefore expect in the immediate future a great stimulus to British export trade (and to the import of gold), retardation in import trade (and in export of gold) and opposite tendencies in the trade of the United States, Canada and Germany. But these adjustments

may be irregular owing to the fact that international trade is so sensitive to the special market conditions of the limited number of articles entering into it as well as to other circumstances. Whatever the mutual adjustments of price levels between countries by international trade and the redistribution of the stocks of gold, I believe the world as a whole is destined to see for many years to come a rapidly rising tide of prices.

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## THE REPORT OF THE TARIFF BOARD ON COTTON MANUFACTURES

In its report on Cotton Manufactures, the Tariff Board has drawn conclusions which, if used as the basis for legislation, will necessitate material reductions in the duties of Schedule I. Conclusions so at variance with manufacturers' statements and protectionist arguments bespeak the independence and impartiality of the report. And the data collected, although in some respects incomplete, provide a valuable source of information for the study of comparative costs, prices, and industrial and commercial methods.

The investigation covered 81 spinning and weaving mills in the United States, with 5,210,836 spindles and 133,761 looms, or about one fifth of the total in the country. In the knit-goods industry the records of only 17 mills were examined. Information was obtained from England, France, Germany, Canada, and Japan, but the chief comparisons were between English and American spinning, weaving, and finishing costs and prices, and German and American knitting costs. England has been the leading competitor in the spinning, weaving, and finishing industries, and Germany in the knit-goods trade.

Inasmuch as raw cotton costs no more in the United States than in Europe, and is subject to no tariff duty in this country, the investigation was confined to manufacturing costs. Special branches, such as lace and embroidery making, were not investigated. The matter of the report may be divided into four parts: (1) spinning, (2) weaving, (3) finishing, and (4) knitting.

(1) The data for determining costs were taken from the books of manufacturers by agents of the Board. Owing to diversity in accounting methods it was necessary to formulate plans of cost determination which could be applied uniformly to the figures from each mill. In spinning, the Board was able to make its most complete analysis of both domestic and foreign costs. Not only is there less diversity of structure in yarns than in fabrics, but more detailed statements could be obtained from English spinners than from other foreign manufacturers.

The Board properly made allowance for the difference in the predominant technical methods in England and the United States,

and compared the costs of ring spinning in America with the costs of mule spinning in England. Although ring spindles are four times as numerous as mule spindles in the United States, American mule spinners' wages, which are much higher than ring spinners' wages, have in congressional tariff debates of the past been frequently used as a standard for comparison.

Owing to the variations in cost, even for spinning one sort of yarn, the selection of a standard which would be representative of the industry as a whole, was difficult. In England the variations were not negligible, but they were less than in American mills. In Lancashire the industry is highly specialized, and wages are regulated by standard lists. In the United States the industry is dispersed over a wider geographical area, and wages, methods, and systems are less standardized. Taking a typical example from the Tariff Board report, in twelve American mills the cost of spinning No. 28 warp yarn (exclusive of the cost of materials) varied from 2.9 to 4.5 cents per pound. In English mills the cost rarely varied more than one half cent per pound.

Instead of computing an average, the Tariff Board compared the figures from the mill in each country, which showed the lowest costs of each product. In a few instances the costs may have been abnormally low and therefore not representative. But the method had the merit of using actual costs from specific establishments. And since the lowest were compared, their utilization for purposes of tariff legislation would lessen the liability to protection of inefficiency. Taken as a whole the comparison is fair.

On this basis it was concluded that for the counts which constitute the bulk of the output of American mills, the lowest English cost, exclusive of raw materials, was about 73 per cent of the lowest American cost. Raw material, however, made up so large a proportion of the total expense that when that was reckoned in, the cost of producing yarn was only 3.8 to 11.9 per cent higher in America. On fine yarns the English spinners had a greater advantage.

The following table (abridged) indicates the differences in labor cost, in total conversion cost,<sup>1</sup> and the relative duties:

<sup>1</sup> By the term "conversion cost" is meant all the costs of manufacturing exclusive of the amount paid for raw materials.



		Difference in labor cost per pound of yarn	Difference in total conver- sion cost per pound of yarn	Duty
Warp yarn	No. 30.....	\$0.0058	\$0.0172	\$0.05
"	" No. 40.....	.0089	.0256	.08
"	" No. 50.....	.0136	.0375	.10
Weft	" No. 30.....	.0012	.0087	.05
"	" No. 40.....	.0031	.0148	.08
"	" No. 50.....	.0058	.0230	.10
"	" No. 60.....	.0069	.0285	.12
"	" No. 70.....	.0088	.0363	.14

No coarse yarns, which would have shown less divergence in costs, were included. But even on the medium counts the duty was in some instances nearly six times as great as the difference in manufacturing cost, and in every case exceeded that difference by a wide margin.

In view of the relatively small difference in labor cost, it seems improbable that the tariff brings much benefit to the operatives in the spinning departments of American cotton mills. The yarn duties, moreover, are of no great assistance to the American manufacturers. The advantages of producing yarn under the direct oversight of the manufacturer who is to weave it, and the costs of packing and shipping, are obstacles which would hinder any considerable importation of ordinary yarn even if the duties were abolished. And even on the protectionist theory that they should correspond to the difference in cost of production, the present duties should at least be reduced.

For thread, or sewing cotton, the Tariff Board did not ascertain any English costs. But it did obtain sufficient data to show the relation between American costs and the duties. On no one of the numerous samples was the duty less than half the American conversion cost, and as a rule it exceeded that cost, sometimes by 100 per cent. In every instance it at least equalled the labor cost and usually was two or three times as high. Since no price quotations for English thread are given, it is not possible to judge the effect of these duties on American prices. There is good reason for believing, however, that the prices have been increased somewhat by the duty, although not necessarily by the full amount. Comparative costs and prices would have been particularly interesting in this case, since it is the one branch of the cotton industry where monopolistic control of prices with the aid of tariff protection is to be suspected.

(2) Relatively more cloth than yarn is imported into the United States, yet the importation of cloth is not large. In value the imports of cloth were only 1.79 per cent of the domestic production in 1909-10. The duties, which average over 42 per cent *ad valorem*, have been restrictive; but that their influence on importation and prices has frequently been overestimated, is indicated by the report of the Tariff Board. Owing to the lack of foreign data, it was not possible to give a detailed comparison of weaving costs in English and American mills. Presumably the English manufacturers were unwilling to open their books to foreigners, by no means an unexpected obstacle. The Tariff Board consequently had to adopt other methods of indicating how the duties on cotton cloth should be adjusted.

Costs and prices were obtained in America for samples of one hundred fabrics, and then from the same samples English price quotations were secured. These quotations and American costs were compared with the duties which would have been levied upon the goods if they had been imported. The costs of more than one thousand other fabrics were ascertained from American mills, and for some a comparison with tariff duties was made. On the basis of relative earnings and relative output per weaver, the comparative labor cost of weaving in the United States and England was indicated. In the summary this last series of comparisons was particularly emphasized.

In comparing domestic and foreign prices and domestic costs for the one hundred samples, warning is given that the figures should be used with caution. The price quotations are not for exactly the same date in both countries, and the American costs and prices are not all strictly comparable. It should also be remembered that more or less abnormal conditions prevailed in the cotton trade during the period for which the data were obtained. Business in general was depressed, and the cotton industry had been disturbed by two successive short crops of cotton.

As in spinning, similarly in the weaving industry, a uniform method of cost determination had to be applied to the records from all the mills. The direct costs for labor and material were readily ascertained, but an arbitrary system had to be chosen for distributing the burden of works expense and fixed charges. Although the method adopted by the Tariff Board may have been the best, at least for its purposes, it did not correspond to that employed by manufacturers. Consequently a manufacturer might

have fixed a different cost on any one of the fabrics analyzed, and where the cost figures given by the Tariff Board exceeded the price, thus suggesting a loss, the manufacturer might have reckoned a profit.

It is doubtless true that numerous American cotton mills have inadequate systems of cost determination, but so far as tariff legislation is concerned the question may be raised as to whether the costs fixed by the Tariff Board, or those fixed by the manufacturers, are to be used as the basis. A manufacturer may assert that he can afford to produce a fabric provided it can be sold so as to yield anything above direct costs and impose a relatively heavy share of the overhead burden on another product. If the duties are to be adjusted on the basis of comparative costs, Congress will have to decide which standard is to be used.

The cost of producing any fabric was found to vary between mills. The cost of manufacturing 36-inch sheeting (sample No. 5), for instance, was two cents per yard higher in one mill than in another. This was one of the widest variations shown in the report, but probably a more elaborate investigation would have revealed others equally great. Variations of one cent per yard in costs were numerous, and these often constituted divergences of fifteen or twenty per cent in the manufacturing cost. Minor discrepancies in structure exist between the samples for which English quotations were obtained and those for which American costs and prices were calculated. But neither these nor the above qualifications invalidate the report of the Tariff Board. On the contrary that report warrants definite conclusions.

By comparing the number of looms per weaver in England and the United States it was shown that even when allowance had been made for the difference in the speed of the looms, the output of cloth per weaver was, as a rule, considerably greater in American cotton mills. Although for the more fancy patterns the difference in the amount turned out per weaver was slight, for ordinary cloth the output was in some instances five times as great in this country. The bulk of the output of American mills consists of plain goods, and for the production of these the American manufacturers have adopted machinery and methods<sup>2</sup> which have enabled them to reduce the labor cost of weaving below the English level.

<sup>2</sup>In an article published in the *Quarterly Journal of Economics*, Nov., 1909, I discussed in detail this adaptation.

The comparison of prices made by the Tariff Board likewise indicates that many cotton fabrics are manufactured as cheaply in the United States as in England. In Table 172, English and American mill selling prices are given for 78 staple fabrics of plain construction, such as are produced in large quantities by American mills; on 53 of these, lower prices were placed by American manufacturers and on two, the price was the same as in England.

The relations of the duties to prices and costs are also pointed out. In the examples given for grey cloth included under paragraph 315 of the tariff law—cloth not exceeding 100 threads per square inch—the American selling prices were in every instance below the English quotations. The duties were from 21 to 43 per cent of the English prices, from nine tenths to nearly three times the American labor cost, and from 54 to 141 per cent of the total American conversion costs. The American prices for twenty-two fabrics included under paragraph 316—100 to 150 threads per square inch—were with two exceptions below the English prices. The duties were from 20.5 to 84.5 per cent of the English prices, and from 78 to over 246 per cent of the American conversion costs. Eleven comparisons were made of fabrics entered under paragraph 317—150 to 200 threads per square inch—and of these eight show lower selling prices in America. The duties ranged from 35 to 50 per cent of the English prices, and from 78.6 to over 159 per cent of the American manufacturing costs.

A comparison of prices on the finest fabrics, where the English prices would have been the lower, was not made. Nevertheless the report shows that as a rule the duties exceeded the American cost of manufacturing exclusive of the expense for raw material. Little information is given concerning the comparative prices of fabrics woven with fancy patterns. But it is stated that for these also the duty frequently exceeded the cost of manufacturing in the United States, and in every case was considerably in excess of the difference in cost.

From these comparisons the conclusion is to be drawn that all the duties on cotton cloth should be reduced and many of them swept away.

(3) In the tariff as it now stands the duties on bleached, dyed, printed, and mercerized fabrics are higher than on grey goods.

The Tariff Board found that for finished fabrics the addition to the duty on the grey cloth was seldom less than one cent per yard, and for one sample it amounted to  $4\frac{3}{4}$  cents per yard. This additional tax generally exceeded the total cost of finishing. Moreover, for most of the samples the American finishing charges were lower than in England. For some processes the American cost was only one half the English. No reason was stated for the relatively low charges in America, but they have doubtless resulted from a larger scale of operation and higher speed of machinery. There seems to be little justification, therefore, for the imposition of heavier duties on finished cloth than on grey goods.

(4) The Tariff Board drew no conclusions in regard to the comparative costs of manufacturing knit-goods in this country and Germany. It merely gave some comparative figures. In Table 178 the domestic costs, the domestic and foreign selling prices, and the duties are given for nine samples of underwear. The duty exceeded the total cost of knitting. Some allowance must be made for the higher cost of spinning knitting yarns in the United States, but even then the duty would very nearly equal the total cost of spinning the yarn and knitting the fabric. These high duties have lessened imports and raised prices.

A few comparisons were also made for full-fashioned hosiery, and they showed lower costs in Germany. In order to get significant figures, however, a comparison should have been made between the costs of manufacturing full-fashioned goods in Germany and seamless goods in the United States. The Tariff Board in analyzing spinning costs properly compared English mule-spun yarn with American ring-spun yarn. A similar allowance for a difference in technical method should have been made in the case of knitting, since the cotton machine predominates in Germany and the seamless automatic in the United States. The costs of manufacturing certain kinds of seamless hosiery in the United States are given, but since there were no importations of such goods no comparison was attempted. Yet it could readily have been pointed out that for such goods the duties would probably have exceeded the manufacturing costs exclusive of raw materials.

The section of the report, therefore, which deals with knit-goods, is not satisfactory and will not be of much help to the legislators. Lack of time may have prevented the preparation of a conclusive statement. Presumably it was particularly difficult to obtain detailed information from foreign competitors

who have had their business repeatedly disturbed by alterations in our tariff duties. Nevertheless this part of the schedule is one to which great interest has been attached. It was in the duties on hosiery that the greatest increases in the cotton schedule were made by the act of 1909.

This report of the Tariff Board is less favorable to the protective system than the report on Schedule K. Hence it has been somewhat more coldly received by the supporters of that system. Although one large association of cotton manufacturers has commended the report on Schedule I, it is doubtful if its conclusions will meet with general approval amongst the mill-owners. They still more or less blindly fear foreign competition and fail to appreciate the advantages which have accrued from the development of machines and methods particularly adapted to the industrial conditions of the country. Their long-continued defense of the protectionist doctrines also makes them reluctant to acknowledge that the industry is no longer dependent on protection.

The results of the study of wholesale and retail prices, however, are a source of gratification to those who adhere to the protectionist principles. The fact that prices are in so many instances as low as in England indicates that the duties on cotton cloth place no serious burden on the consumer. The analysis of the system of distribution explains why it is that even when the manufacturers' prices are no greater in America retail prices are higher than abroad. For this the greater expense of distribution and the system of customary fixed prices are said to be responsible. In the President's message attention was called to the additions to manufacturers' prices by jobbers and retailers. And in their search for new debating ground others have asserted that the middlemen were beneficiaries of the protective system and that blame for high retail prices of cotton cloth did not rest on the manufacturers.

The review of the Tariff Board report by the secretary of the Home Market Club in Boston is suggestive. Though the report is accepted as impartial, the secretary avoids the conclusion that duties should be reduced. Attention is called to the fact that in the cost of production the item of interest was not included, although on account of higher cost of construction and equipment the interest charges would be greater in the United States. The

benefits of the protective duties to the jobber and retailer are emphasized. And it is asserted that if the duties are placed too low, importations will increase, operatives will be thrown out of work, and the middlemen, not the consumers, will receive the benefit. In this last chain of reasoning it is assumed that there would be a fairly large increase in imports even when manufacturers' selling prices are no higher in this country.

In that review the doctrine that tariff duties should be adjusted so as to equal the difference in cost of production is repudiated. Such duties would not be sufficiently high. An "equalizing" is not a "protective" tariff, it is said, since the former does not give an advantage to domestic producers. Protection thus seems to be made synonymous with prohibition. If that be the purpose of our tariff, the present duties on cotton manufactures should not be reduced. But why bother about rates at all? It would be far simpler to adopt the old-fashioned policy of specifically prohibiting the importation of those products which should be protected.

The lack of emphasis on the labor argument is also significant. The report of the Tariff Board proves that higher earnings by the operatives do not necessarily mean higher labor cost for the American cotton manufacturers. Heretofore this has never been admitted by the advocates of protection. This report, therefore, will cause some shifting in grounds of defense for the protective duties.

So far as legislation is concerned, the report, in spite of its shortcomings, is serviceable. The difficulties encountered were such as might have been expected in an investigation where there was diversity in methods of cost accounting and wide variations in cost. And foreign manufacturers were naturally reluctant to reveal the details of their business. The evidence, to be sure, is least conclusive on those points where the greatest controversy will arise, and does not indicate just what duties should be fixed. None the less, it proves that there should be a genuine downward revision of the duties on cotton goods.

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## A BALANCED TARIFF

There can be no question as to the attitude of the American people toward the present tariff. The demand for a reduction in our present duties has been long continued and is insistent. There is every indication that certain schedules will be revised in the near future, but it is not to be expected that this will be accepted as even a temporary settlement of the tariff question. In fact, the general plan of tariff revision which seems to find most favor today—the revision of one schedule at a time—would in itself tend to keep the tariff problem before the public eye as a matter of general concern, and possibly as a political issue.

Compared with the system of periodic general revisions of the whole tariff, the method of revising the individual schedules *seriatim* has obvious advantages. It lessens the shock to industry and business; it makes possible the more thorough consideration of the facts relating to conditions in industries affected by the tariff; it minimizes the opportunity for vote-trading and for log-rolling of various sorts. But these considerations all relate to the economic or political aspects of the tariff; that is, to the tariff viewed as a protective measure. So far as the revenue aspects of the tariff are concerned the older system of tariff legislation had some advantages which do not appear in the method of revision schedule by schedule.

In a general revision of the tariff a cut in rates involving an appreciable loss in governmental revenue could be balanced by increases in the rates on other items or by imposing duties on commodities previously admitted free. Despite the crudities in the methods of preparing and amending tariff bills, the tariff as a whole was generally framed so as to yield an adequate amount of revenue to the government.

That tariff bills have been regarded as general revenue measures is clearly shown by the occasional inclusion or contemporaneous adoption of revenue-yielding devices other than duties on imports, such as the income tax of 1894, and the corporation tax of 1909. In both of these instances a probable decrease in tariff revenues was partly responsible for the desire to create new sources of revenue.<sup>1</sup>

If the tariff is to be revised gradually, as it should be, and if

<sup>1</sup> Noyes, *Forty Years of American Finance*, p. 227; Robinson, "The Federal Corporation Tax," *AMERICAN ECONOMIC REVIEW*, vol. I, p. 691.

the general trend of this revision is toward lower duties, there must of necessity be a continual increase in the revenue yielded by other sources of federal increase. In revision schedule by schedule, with each important decrease in customs duties necessitating an increased revenue from some other source, the result would be apt to be a needlessly complex revenue system, and there would also be the recurrent temptation to resort to dangerous fiscal experiments. At any rate, it will be readily conceded that any proposals looking toward considerable reductions in the amount of revenue yielded by our protective duties should be accompanied by suggestions as to practicable methods of making up the deficiency in revenue.

It is the purpose of the present paper to suggest a plan by which compensation for the decrease in customs receipts can easily be made. This additional revenue would come in the first instance from those directly benefited by the protection which the tariff schedules provide. The plan proposed would also, it is confidently believed, introduce a new principle into tariff legislation, by which tariff rates would tend to readjust themselves to a fair level as conditions changed.

The main proposal is simply that all manufacturers or other producers of goods protected by the tariff should be required by congressional enactment to pay a federal excise license or tax equal to a fixed proportion (say five per cent) of the import duties on such articles. It is also highly desirable that there should be a permanent tariff commission to which manufacturers, other producers, and all interested parties might submit facts and petitions relating to the revision of tariff schedules. The commission, in turn, would submit its own recommendations to Congress. It would seem that this simple plan would so operate as to produce the following results: (1) The tariff duty would be withdrawn on many articles, and additions to the free list would be made almost automatically as conditions changed. (2) Excessive duties would be reduced, and there would be no incentive to any manufacturing interest to ask for unnecessarily high protection. (3) There would be a tendency to reduce such unduly high monopoly prices as are made possible by high tariff rates. (4) A large and elastic revenue would be yielded. (5) The tariff on many necessities could be greatly reduced. These five points will be discussed in order:

(1) Manufacturers and other producers would petition the tariff commission for the removal of the tariff on all articles which, from the producers' point of view, need no protection. By such producers the excise tax would be felt as a useless and burdensome expense. This would simplify our present tariff schedules by eliminating all dead items. Moreover, from time to time in the future, by a similar process, the tariff would be removed from other articles, which, under changed conditions, no longer needed protection. There is much dead wood in our present tariff schedules. In default of a plan such as the one proposed, which relies upon the self-interest of manufacturers for the initiative in these matters, it would require ceaseless vigilance upon the part of the tariff commission and of Congress to keep the schedules properly pruned.

(2) Since the proposed excise tax is made a fixed per cent of the full amount of the tariff schedule, manufacturers and other producers would petition the commission for lower tariff rates on all articles on which the tariff is higher than is needed for protective purposes. For example, if the present tariff on a certain article is 50 per cent and if foreign goods cannot compete in our market unless the tariff is as low as 10 per cent, it would naturally follow that our home producers would desire that the tariff be reduced to say 20 per cent, as they would not care to pay five per cent on a 50 per cent schedule (or 2.5 per cent on the value of their product) if five per cent on a 20 per cent schedule (or one per cent on the value of their product) would give them the necessary protection. Thus from time to time, as conditions changed, the schedules would be revised in such a manner that the tariff would always be "balanced" or adjusted to what (under the protective principle) may be called its natural level.

(3) It may be objected that in many cases manufacturers would prefer to leave the present schedules unchanged, despite the excise tax, because the additional protection enables them to charge higher prices and thus to secure higher profits. It is evident that this objection does not apply in cases where competition among home producers is sufficiently active to have any efficacy as a price-fixing force. When there is real competition a permanent condition of abnormally high profits is as impossible in protected industries as in unprotected ones. Only when there is an effective combination of home producers, or a monopoly of any

other sort in the protected industry, does the objection mentioned have any weight. And even in this case the proposed balanced tariff would not be without effect. Today, tariff protection costs the monopoly or combination nothing. The excise tax, bearing a fixed ratio to the amount of tariff protection received, would be a direct burden upon such high monopoly prices and profits as are made possible by unduly high protective duties. Even without the excise tax high monopoly prices do not, of course, create profits correspondingly larger than lower prices would bring, for the reason that in general a smaller quantity of goods can be sold at the higher than at the lower prices. The excise tax would be relatively greater on the higher than on the lower prices (where a high tariff rate is the condition that makes high prices possible), and would in many cases lead the monopolists to prefer to sell at lower prices with reduced tariff protection and with a correspondingly lower excise tax. In fact, under these conditions, the excise tax, although directly proportioned to the tariff rate, would vary roughly with the price a monopolist desired to charge for his goods. It would operate, in effect, much as would any tax upon the value of the monopolist's products, in which the tax rate progresses as the price is increased. Such a tax must in many cases tend to induce the monopolist to lower his prices, by making high prices relatively less profitable than they were before the tax was imposed.

(4) The excise tax proposed would produce a continuous revenue and, as will be shown presently, a tax rate equal to five per cent of the tariff rate would yield a very large revenue. The five per cent rate is taken arbitrarily for illustrative purposes for reasons of simplicity. The determination of the proper rate would be, of course, a matter for careful, thorough, and expert study. Slight variations in the rate would bring about large variations in the amount of revenue yielded. For this reason the proposed tax would add a highly elastic feature to our revenue system.

As compared with other plans for supplementing our present federal tariff and internal revenue system, the one here advocated has the unique merit that it involves absolutely no discrimination of any kind and that it is levied directly upon persons who are benefited by the protective tariff. It can be readily reconciled with either the "benefit" or the "ability to pay" theories of tax-

ation. From the point of view of constitutionality it stands, as an indirect tax, on unassailable ground, in which respect it has an advantage over federal income, inheritance, or corporation taxes. Its adoption would make it possible for the federal government to leave the whole field of direct taxation and of experimentation with new and untried forms of taxes to the individual states.

(5) The possibilities of tariff revision under the balanced tariff system are not limited to matters in which the producers themselves would take the initiative. In fact, by supplying an adequate source of revenue, it should make it easier to secure a gradual revision of the tariff along desirable lines. At present, for example, revenue considerations are strongly urged by those who advocate the retention of the tariff on such necessities as sugar and rice, and on wool and other raw materials. The extent to which the revenue yielded by the proposed excise tax would do away with the necessity of resorting to import duties on such commodities, may be indicated by an examination of the tariff receipts for 1905, the latest year for which the results of the federal census of manufactures are as yet available. The following table shows the value of goods manufactured in the United States in 1905, according to the census of that year, classified according to the tariff schedules, and the average rate of duty collected upon similar articles imported under each of the specified schedules, together with a statement of what the yield of an excise tax equal to five per cent of the average tariff rate would have been. The estimate is not altogether accurate, because the various kinds and goods of articles in each schedule are subject to different rates of import duty, and probably enter into our domestic manufactures in somewhat different proportions than they do into our imports. The "average rate of duty collected" is merely the ratio of the total customs receipts under each schedule to the total value of the goods imported. The results are, however, accurate enough to be of significance for present purposes.<sup>2</sup>

<sup>2</sup> Because the purpose of the figures is only illustrative, no attempt is made to take account of the possible effects of the excise tax upon the quantity of goods manufactured. Any overestimate on this account of the yield of the excise tax is at least partly compensated for by the fact that the census of manufactures does not include the whole manufacturing product, but only that part of it which is produced by firms making a "standardized product" for the general market. Custom work of all kinds is thus excluded.

Schedule	Manufactured in U. S. (millions)	Average rate of duty collected (per cent)	Excise tax at 5% of duty (per cent)	Yield of excise tax (thousands)
A. Chemicals, oils, paints	\$578	30	1.5	\$8,593
B. Earths, earthenware, glass	427	58	2.9	12,107
C. Metals and manufactures of	3,130	39	1.9	59,475
D. Wood " " "	1,398	15	0.7	9,754
E. Sugar, molasses, and " "	418	56	2.8	11,573
F. Tobacco and manufactures of	331	109	5.4	17,880
G. Agricultural products, etc.	2,195	40	2.0	43,897
H. Spirits, wines, etc.	474	72	3.6	16,880
I. Cotton manufactures	1,014	54	2.7	27,381
J. Flax, hemp, jute, etc.	185	40	2.0	8,702
K. Wool and manufactures of	767	91	4.5	34,524
L. Silks and silk goods	133	53	2.6	8,465
M. Pulp, paper and books	549	25	1.2	6,587
N. Sundries	1,495	40	2.0	29,914
O. Other articles not provided for	459	20	1.0	4,585
Total	\$13,534			\$290,318

The customs duties collected on articles included in the foregoing list amounted in 1905 to \$166,967,000. This together with a revenue of \$290,318,000 from the excise tax would have amounted to \$457,285,000, whereas the total revenue collected by customs duties in 1905 amounted to only \$261,799,000. It is evident that the tariff might have been confined to the articles included in the table, and that the excise tax could have been as low as 1.5 per cent of the tariff duties and yet have produced as much revenue as was actually collected. The more important items not included in the figures given in the table were as follows:

	Duty (per cent)	Revenue (thousands)
Sugar and molasses.....	56	\$51,395
Wool .....	46	16,530
Fruit and nuts.....	42	5,774
Provisions, meat and dairy products.....	38	1,583
Fish .....	18	1,505
Breadstuffs .....	29	1,438
Vegetables .....	36	1,418
Rice .....	41	797
Iron ore .....	15	263
Salt .....	40	203

Under the system proposed, some or all of these duties might have been reduced or abolished altogether without impairing the federal revenues. It is apparent that such a reduction in the

tariff on the necessities of life and on important raw materials would in itself tend to lessen the present high cost of living. And there are, of course, the natural effects of such reductions upon other parts of the tariff—such as the effect of a reduction in the tariff on wool upon the tariff on manufactures of wool—to be taken into account.

It will be said, however, that the consumer will have to bear the burden of the excise tax, which would be shifted to him by the producers in the form of higher prices. This is to be admitted, so far as the goods affected are competitively produced, but it should be remembered that the consumer pays our present tariff duties in precisely the same manner. With the same federal expenditures, no more could be taken from his pocket by one device than by the other. Moreover, so far as the goods affected are produced by monopolies, there are, as we have seen, reasons for thinking that in many cases the prices charged consumers would be decreased rather than increased by the excise tax. But a yet more important aspect of the question, in relation to the question of the consumer's interests, is the possibility which the proposed new source of revenue affords of gradually reshaping the tariff so that it will bear less heavily upon the necessities of life and upon other articles which occupy an important place in the purchases of the great masses of the people.

One possible general objection to the whole theory of the balanced tariff remains to be considered. It will very likely be said that it involves the recognition and maintenance of the protective principle; that in reality it strikes more heavily against the revenue features than against the protective features of our present tariff. More especially, it may perhaps be urged, its tendency to keep tariff duties near the minimum below which foreign goods could be profitably imported, amounts to a recognition of the so-called principle of the "equalization of the costs of production" as the foundation of tariff reform.

In answer to all this it may be said, first, that the notion of the balanced tariff conflicts with the notion of a revenue tariff only in so far as revenue needs serve as an apology for unduly high protective duties or for the heavy taxation of necessities, and, second, that the balanced tariff is not meant to involve the abandonment of the principle of protection. It is presented merely as a practicable scheme of tariff reform, in which due at-



tention is paid to revenue features. The widespread popular dissatisfaction with our present tariff does not in general seem to proceed from dissatisfaction with the protective principle so much as from the knowledge that in many cases the rates are much higher than are really necessary for the protection of home producers. That is, it is felt that the protective tariff should not be a shield for laxity in industrial or business methods or for the extortions of monopolies or combinations.

Conceding that the principle of the "equalization of the costs of production" affords no guide to the selection of the particular industries that should have the benefit of protection, it may yet be maintained that it furnishes about the only practicable guide to any tariff revision which does not involve the complete or partial abandonment of the protective principle. The recent report of President Taft's Tariff Board on the woolen schedule indicates that statistics of "comparative costs" are apt to be too complicated and too indefinite to be of much direct value in tariff legislation. The balanced tariff would achieve its end by placing less reliance upon statistical investigations than upon the self-interest and initiative of the producers directly benefited by the protective duties. It assumes that if producers had to pay for the protection afforded them, they would not care to pay for more protection than they need. Furthermore, in addition to its direct effect on the reduction of unduly high protective duties, it would make easier the gradual general revision of the tariff under the initiative of a tariff commission or of Congress, and in such a revision it would make it possible to shape the tariff in accordance with a broad consideration of the public welfare, relatively unhampered by the exigencies of the revenue system.

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### JEVONS' "THEORY OF POLITICAL ECONOMY."

None of the various filial services which Professor H. S. Jevons has performed in the way of rounding out and making more accessible his father's work will be received more gratefully by economists than the new edition of his most important book on economics.<sup>1</sup> Except for a few corrections and explanatory notes the body of the book is a reprint of the third edition, which has been out of print for some years, but some important new matter is given in the appendices. The promised extension of the bibliography of mathematical economics does not carry it beyond the year (1879) to which it had been brought in the third edition by Mrs. Jevons. Some new titles have been added, but the list as it stands is less complete than that part of the bibliography in Fisher's edition of Cournot which covers the same period. There are included, however, some interesting and previously unprinted notes by W. S. Jevons on a few of the writings of his predecessors and contemporaries.

It happens that it was just fifty years ago that Jevons, then twenty-seven years old, sent to the British Association meeting at Cambridge a short paper entitled, "Notice of a General Mathematical Theory of Economy." This was accompanied by another paper on "The Study of Periodic Commercial Fluctuations." Jevons' innovations in theory do not seem to have attracted much attention at the time of this, their first public presentation. He wrote to his brother that he was informed by the secretary that both papers "were read before the F Section, and the second [the statistical study] was approved of."<sup>2</sup> Jevons had become interested in political economy in the course of the extensive reading which filled most of his spare hours during the years from 1854 to 1859, while he was serving as Assayer of the Mint at Sydney, Australia. His conviction, then formed, that the field of "social science" had been unsatisfactorily tilled by previous writers and that it was a field in which he might hope to accomplish work of

<sup>1</sup> *The Theory of Political Economy*, by W. Stanley Jevons, with *Notes and an Extension of the Bibliography of Mathematical Economic writings* by H. Stanley Jevons. (Fourth edition. London: Macmillan and Company, Ltd. 1911. pp. lxiv, 339.)

<sup>2</sup> *Letters and Journals of W. Stanley Jevons*, Edited by his wife, p. 169.

importance, were among the reasons which led him to resign a fairly lucrative position and to return to England and an uncertain future. During the four years immediately following, Jevons completed his work for the B. A. and M. A. degrees at University College, London, where political economy continued to claim a considerable share of his attention. Two letters written to his brother in 1860 are worth quoting:<sup>3</sup>

During the last session I have worked a good deal at political economy; in the last few months I have fortunately struck out what I have no doubt is the *true Theory of Economy*, so thoroughgoing and consistent, that I cannot now read other books on the subject without indignation. While the theory is entirely mathematical in principle, I show, at the same time, how the data of calculation are so complicated as to be for the present hopeless. Nevertheless, I obtain from the mathematical principles all the chief laws at which political economists have previously arrived, only arranged in a series of definitions, axioms, and theories almost as rigorous and connected as if they were so many geometrical problems. One of the most important axioms is, that as the quantity of any commodity, for instance, plain food, which a man has to consume, increases, so the utility or benefit derived from the last portion used decreases in degree. The decrease of enjoyment between the beginning and end of the meal may be taken as an example. And I assume that on an average, the *ratio of utility* is some continuous mathematical function of the quantity of commodity. This law of utility has, in fact, always been assumed by political economists under the more complex form and name of the Law of Supply and Demand. But once fairly stated in its simple form, it opens up the whole of the subject. Most of the conclusions are, of course, the old ones stated in a consistent form; but my definition of capital and law of the interest of capital are, as far as I have seen, quite new.

. . . . I expect every success from my theory of political economy, which seems to develop itself with that facility which is a proof of its soundness. It assumes the form of a complicated mathematical problem, from which all the common laws with due limitations flow. Independently, however, of the mathematical form, it has led me to a new view of the action of *capital*, which affords a determining principle for *interest*, profits of trade, wages; and I now perceive how the want of knowledge of this determining principle throws the more complicated discussions of economists into confusion. The common law is that demand and supply of labour and capital determine the division between wages and profits. But I shall show that the whole capital employed can only be paid for at the same rate as the *last portion* added; hence it is the increase of produce or advantage, which this last addition gives, that determines the interest of the whole.

<sup>3</sup> *Letters and Journals*, pp. 151, 155.

These letters are significant, not so much because they have some bearing upon the more or less futile questions relative to Jevons' priority in the formulation of certain theories or the use of a particular method, as because they foreshadow so completely the tenets of the *Theory of Political Economy* of 1871. The book contains very little of importance beyond the matters mentioned in the letters of 1860. The printed abstract of the British Association paper of 1862,<sup>4</sup> in fourteen separate propositions, makes clearer the hedonistic basis of the new theory, explains the nature of the proposed mathematical equations, states the new definition of capital, and adds a tentative theory of wages. During the next few years Jevons gave his spare time to various studies in statistics and in logic and to his book on *The Coal Question*. When, in 1866, his paper on "A General Mathematical Theory of Political Economy" was first published *in extenso*,<sup>5</sup> it had received no revision. Logical studies, including some preliminary work on his *Principles of Science* continued to absorb his attention until the winter of 1870-71, when, Mrs. Jevons tells us,<sup>6</sup> "he returned with renewed interest to political economy and devoted himself entirely to the writing of *The Theory of Political Economy*. This work was of such absorbing interest to him that he made rapid progress with it." Some correspondence with Fleeming Jenkin relative to the use of the mathematical method in economics and the publication, in 1870, of Jenkin's "Graphic Representation of the Laws of Supply and Demand" in Grant's *Recess Studies* seem to have led Jevons to hasten this completer presentation of his own theories.<sup>7</sup>

Despite Jevons' growing reputation, the book was slow to make a place for itself. In 1874 Jevons wrote to M. d'Aulnis de Bourouill of the University of Leyden, "What I have written on the subject of mathematical economics has received little or no attention in England, and by those who have noticed it the theory has been generally rejected, or even ridiculed."<sup>8</sup> The "Saturday Review" had printed a review of the *Theory* by Cairnes, who did not let his confessed inability to understand much of the argument pre-

<sup>4</sup> *Report of the British Association for the Advancement of Science*, 1862, Notices and Abstracts, p. 158.

<sup>5</sup> *Journal of the Statistical Society*, vol. XXIX, p. 283. Reprinted as Appendix III in the present edition of the *Theory*, pp. 303-314.

<sup>6</sup> *Letters and Journals*, p. 251.

<sup>7</sup> H. S. Jevons' preface to the present edition of the *Theory*, p. lvii.

<sup>8</sup> *Letters and Journals*, p. 309.

vent him from handling it severely. Marshall had contributed to the "Academy" an able and discriminating review, which, although fair, was in no manner enthusiastic. The only English writer of importance who definitely espoused the cause of the mathematical method in general and Jevons' theories in particular was G. H. Darwin, who, in reviewing Cairnes' *Leading Principles* in the "Fortnightly Review" in 1875 defended Jevons' *Theory* against Cairnes's criticisms. It seems, however, that from the first the book had attracted somewhat more attention on the Continent than in England. Appreciative letters from such men as Walras, Bodio, and d'Aulnis de Bourouill and the ensuing correspondence with them must have done much to support Jevons' confidence in the soundness and importance of his own work and to quicken his desire to extend his analysis to other parts of the field of economic theory. Even his discovery that he was not the only one nor even the first in the field—that the very fundamentals of his theory had been anticipated in the forgotten writings of Gossen and Dupuit; that Walras, working independently, but almost contemporaneously with himself, had utilized methods and reached conclusions which were in many respects like his own; that Cournot had applied the mathematical method to a somewhat different class of problems with unequaled power and fluency—whetted rather than dulled his enthusiasm. Whatever disappointment he may have felt that some honor of priority was taken from him was more than balanced by the satisfaction that his theories rested upon so broad a basis of authority.

It was not long, however, before the *Theory* began to gain a more serious consideration in England than it had received at first. Jevons' standing as a logician of the first rank had been firmly established by the publication of *The Principles of Science*, and his continued output of brilliant studies on a wide variety of topics reached an appreciative and growing audience. In short, he had become a man to be reckoned with. The revolt against the political economy of the orthodox line, headed by Thornton, and continued by Cliffe Leslie and Ingram led some few persons, at least, to look for a new economic gospel. And the growing influence of Marshall's teaching at Cambridge was not without its effect. In 1875 Jevons wrote to Walras:<sup>9</sup>

<sup>9</sup> *Letters and Journals*, p. 332. In 1881 he wrote to the same correspondent, "I am glad to say I think the mathematical view of economics is making much progress in England, and is fully recognized by those competent to judge." *Ibid.*, p. 431.

I think that a considerable change of opinion is taking place in England. Various correspondents express their acquiescence, and some of the professors are beginning to bring the theory before their students. When I was in Cambridge two months ago I found that the subject was much better understood there than I had supposed, and I have little doubt about its gaining ground ultimately. . . . I have no doubt whatever about the ultimate success of our efforts, but it will take some fighting; the disciples of J. S. Mill being bitterly opposed to any innovation upon his doctrine.

The second edition of the *Theory* (the last edition during Jevons' lifetime) appeared in 1879. The most important additions besides the bibliography of mathematical economics and the lengthy and interesting preface, are the discussions of the "dimensions of economic quantities." Here Jevons illustrates to perfection his extraordinary power of raising new questions of the utmost significance, without satisfactorily solving them. In some respects, one is forced to feel, his treatment of the "dimensions of economic quantities" is perfunctory and superfluous, while in other respects it is suggestive but tantalizingly incomplete and not altogether accurate.<sup>10</sup> But for the most part the second edition follows closely the lines of the first, and the first is little more than a working-out of the theses announced in 1862 and foreshadowed in the letters of 1860.

These facts, fairly well known for the most part, in the history of a book now become a classic, suggest in themselves the strength and the limitation of the work. In the preface to the second edition Jevons stated that the book "was never put forward as containing a systematic view of economics. It treats only of the theory and is but an elementary sketch of elementary principles. The working-out of a complete system based on these lines must be a matter of time and labor, and I know not when, if ever, I shall be able to attempt it."<sup>11</sup> Even more accurate is his description of the work as "a bare and imperfect outline of some of the more important theorems of political economy."<sup>12</sup> In fact, the book does not furnish even the skeleton of a system of economics. It contains only the uneven results of Jevons' attempts to expand and correlate his brilliant suggestions of 1862. Despite his continued in-

<sup>10</sup> This matter has been carefully discussed by Mr. P. H. Wicksteed, in the *Quarterly Journal of Economics*, vol. III, pp. 297-314.

<sup>11</sup> Fourth edition, p. xliii.

<sup>12</sup> Jevons to d'Aulnis de Bourouill, *Letters and Journals*, p. 309.

terest in these doctrines, the many and varied other interests of the author and his fertile originality kept his enthusiasm constantly centered on new intellectual problems. The *Theory* as it stands was written under the pressure of a sense of unfulfilled duty to himself and to his own reputation. Jevons' intellectual independence was too rugged and his antipathy to the school of Mill too deep to permit him to fit his own theories loosely into the general body of economic doctrine by a process of easy eclecticism. Not that he did not consciously accept and utilize certain established economic doctrines, such as the theory of land rent, but rather that all such had to be wrought over in his own thinking and thoroughly amalgamated with his own theoretical departures. The book, then, is not inconsistent, but rather, as was suggested, uneven and unsystematic. At one point we find, for example, such marks of staleness as tedious mathematical elaborations of truisms in the theory of exchange; at another point a brilliant but uncrystallized theory of interest. The first four chapters are, in general, more completely elaborated than are the remaining four. No one realized these deficiencies more clearly than Jevons himself. It was his hope to complete a large systematic treatise on political economy, which should embody his own views but which should be non-mathematical and in other ways less technical than his *Theory*. The disappointing fragments of the *Principles of Economics* do not enable one to say with any confidence that the project, if completed, would have been successful.<sup>13</sup>

The *Theory of Political Economy* is one of those books which are more widely quoted than read. There are indications, moreover, that the preface and the first three chapters are somewhat better known than the balance of the book. It is unfortunate for both Jevons' reputation and his influence that such should be the case, for the last three chapters contain the outlines of his theory of distribution, which, fragmentary as it is, is by no means a negligible contribution to economic science. Even the better known parts of the *Theory* are worth a reconsideration at this time, if for no other reason than that new currents of economic thought have brought Jevons' work into a somewhat different perspective than that in which it appeared to his contemporaries.

<sup>13</sup>The admirably lucid *Primer of Political Economy* does not throw any light upon the question of Jevons' power to weld his doctrines into an effective and rounded system of economic theory. Intended for elementary schools, it contains little theory, and what there is is mostly of a conventional sort.



Jevons was the first significant writer consciously to blend English utilitarianism with the theories of abstract economics. And no subsequent writer has more unqualifiedly and definitely accepted the hedonistic interpretation of economic motives. So extended is his discussion of the calculus of pleasure and pain and so explicit is his reliance upon it, that it might easily be inferred that the significance of his whole theory hinges upon the adequateness of the hedonistic psychology. But such, I think, is not the case. Mr. Wicksteed, himself a disciple of Jevons, has clearly shown in his *Common Sense of Political Economy*, that the notion of "marginal significance" retains as much validity when instincts and habits are counted among the forces governing men in their economic relations as when only "economic men," actuated solely by a reasoned pursuit of a maximum of pleasure, are postulated. Pareto, although many of his doctrines (especially those relating to the *maximum d'ophélimité*) are, like those of Walras, essentially hedonistic, is careful to point out that his general theory of "economic equilibrium" does not rest upon the postulate of utility (*ophélimité*).<sup>14</sup> Jevons' theories of exchange and distribution could be similarly divorced from their apparently hedonistic basis without substantial alteration of their essential features, and with a distinct gain in the flavor of actuality.

Jevons' elaborate exposition of the theory of utility was not, however, without purpose. The *Theory* embodies a protest against the economics of Ricardo and Mill. The chief count in the indictment was their neglect of the factor of utility in the "utility and scarcity" couplet, and it devolved upon Jevons to give this factor what he thought was its rightful position of primacy. But his interest in the analysis of utility went farther than establishing it as the psychological basis of the theory of catallactics. In Jevons' view economics and ethics were inseparably connected. "The object of economics," he says, "is to maximize happiness by purchasing pleasure, as it were, at the lowest cost of pain."<sup>15</sup> Jevons seems to have hoped that the principles of economics would be useful guides to individual as well as to social action. This would, of course, involve a curiously circular system, for his general economic principles were supposedly deduced only from assumptions as the

<sup>14</sup> *Manuel d'économie politique*, p. 169, note.

<sup>15</sup> *Theory*, p. 23. Compare the frequent assertions of the ethical purpose of economics in the *Primer*.

motives which do actually operate in economic intercourse. But Jevons' utilitarian ethics could be eliminated from his work even more easily than his hedonistic psychology. Whatever would have been the position of ethics in his completed system, the book as it stands is confessedly concerned only with "the mechanics of utility and self-interest."<sup>16</sup>

The most famous contribution of the *Theory* is the concept of the "final degree of utility." This concept is not precisely like the concept of "marginal utility," with which it has usually been identified. For practical purposes both concepts come to about the same thing, and such difference as there is may be attributed to the fact that the concept of "marginal utility" was not, in its origin, mathematically formulated.

The final degree of utility is, substantially, the quotient of marginal utility (conceived as the utility of the marginal increment) divided by the size of the marginal increment, where this increment is very small. More accurately, it is the *ratio* of the increase in total utility to the increase in the quantity of the commodity *at the margin*. "Final degree of utility" is not only the more precise notion but it has the further advantage of being conceptually independent of the nature of the unit (pounds, bushels, yards, etc.) in which the commodity in question is usually measured. This latter quality made possible its convenient use in Jevons' "equations of exchange."<sup>17</sup> But marginal utility is the less abstract concept, and is undoubtedly better adapted to popular exposition.

Jevons did not utilize the notion of "subjective value" in his theory of exchange, although he suggested that final degree of utility is synonymous with value in the sense of "intensity of desire or esteem for a thing." What Jevons, in common with other mathematical economists, primarily concerned himself with was the *ratio of exchange*. His fundamental theorem is that the ratio of exchange of two commodities is inversely proportional to their final

<sup>16</sup> *Theory*, p. 21.

<sup>17</sup> The theorem that a person tends to adjust his expenditures so that the "marginal utilities" of the various commodities consumed are equal is, of course, true only when it is stipulated that the marginal increment is conceived as the amount of a commodity that can be bought with a dollar or other small unit of money. When "final degrees of utility" are involved, the theorem holds true without qualification. "Marginal utility" is, for this reason, poorly adapted to the analysis of barter. "Final degree of utility" is the precise equivalent of Pareto's *ophélimité élémentaire* and of Walras' *rareté*.

degrees of utility. Final degree of utility is thus used, not as measuring value, but as determining a proportion.

The mathematical statement of this principle took the form of the well-known "equation of exchange," which remains Jevons' most substantial contribution to distinctly mathematical economics.<sup>18</sup> It cannot be said, however, that this equation has proved itself a useful tool in economic analysis. It assumes direct barter between a pair of traders. Professor Edgeworth has shown in his *Mathematical Psychics* that, given under these conditions only the functions which express the utility to each of the traders of the commodities to be (partly) exchanged, the ratio of exchange will be indeterminate. Either the quantities exchanged or the rate of exchange itself must be given to make the problem determinate. Jevons meets the difficulty by invoking the "law of indifference" (that there cannot be more than one price for any one article in the same market at the same time). This means, of course, that his traders are not to be considered as isolated, but as members of a general market. There are, however, substantial reasons for thinking that postulating the "law of indifference" is equivalent to assuming the existence of a general medium of exchange.<sup>19</sup> Jevons did not realize that he had implicitly made such an assumption. Like many other economists he seems to have considered purchase and sale and money prices as only the superficial aspects of barter and of direct "ratios of exchange." By thus neglecting to deal directly with the positive facts of the market, he forfeited something of scientific precision as well as some advantage in exposition.

When we pass from the bargains struck by pairs of traders to the larger problem of the determination of the ratios of exchange in the general market, the difficulties of Jevons' methods are multiplied. Jevons avoids rather than meets these difficulties by utilizing the concept of the "trading body," which "may be a single individual in one case; it may be the whole inhabitants of a continent in another; it may be the individuals of a trade diffused through a country in a third. England and North America will be trading bodies if we are considering the corn we receive from America in exchange for iron and other goods. . . . The

<sup>18</sup> It is, for example, the only formula in the *Theory* mentioned by Pareto in his article "*Anwendungen der Mathematik auf Nationalökonomie*," in the *Encyclopädie der mathematischen Wissenschaften*. The equation is identical with Walras' "equation of maximum satisfaction."

<sup>19</sup> Cf. Marshall, *Principles of Economics*, fifth ed., appendix F.

farmers of England are a trading body when they sell corn to the millers, and the millers both when they buy corn from the farmers and sell flour to the bakers."<sup>20</sup> The trading body, whatever its nature, is made to play the role of an individual trader. Thus, by the equation of exchange, the ratio at which English iron is exchanged for American wheat is the reciprocal of the ratio of the final degree of utility of iron to the final degree of utility of wheat, which latter ratio must be the same for both trading bodies. Jevons was too clear a thinker really to adopt the vague concept of "national (or group, or social) final degree of utility." But he thought that the economic laws representing the conduct of groups might be thought of as "fictitious averages" of the laws representing the conduct of the different individuals in the group.

The highly abstract and figurative nature of the concept of the "trading body," as applied to the whole group of dealers in a commodity, is indicated by the fact that if it were taken in any literal sense the market could not be supposed to be competitive. With all the millers and all the bakers in England conceived rigidly as a single pair of traders, the "law of indifference" could not be invoked, and the equation of exchange would not lead to a determinate ratio of exchange. Jevons' refusal to assume a general medium of exchange is primarily responsible for these difficulties. When the existence of money is taken into account Jevons' equation of exchange leads very naturally to the analysis of *supply and demand at a price*. In discussing Thornton's criticism of the "laws of supply and demand," Jevons for the moment slips into the vocabulary of the money economy: "Any change in the price of an article will be determined not with regard to the large numbers who might or might not buy it at other prices, but by the few who will or will not buy it according as a change is made close to the existing price."<sup>21</sup> Jevons fails to see the inconsistency of this now generally received principle of the significance of marginal traders with his own notion of the operations of a trading group as an average of the operations of its members, and its perfect consistency with the theory of market value for which he takes Mill to task.

Jevons' discussion of the relation of the costs of production of

<sup>20</sup> *Theory*, p. 88.

<sup>21</sup> *Theory*, p. 109. In the *Primer*, p. 100, he uses the very "equation of demand and supply" for which he criticises Mill in the *Theory*, p. 101.

commodities to their ratios of exchange is also based on the hypothesis of a barter economy, and is subject, in general, to the same limitations that obtain in his treatment of the relation of utilities to ratios of exchange. The ratio of exchange of two commodities is held to be directly proportional to the "degrees of productiveness of labor applied to their production." The "degree of productiveness of labor" is the ratio of product to the labor expended in producing it at the margin where the degree of disutility of labor is equal to the degree of utility of the product. Costs of production (in labor) are, of course, inversely proportional to the "degrees of productiveness."

In this manner Jevons develops new equations of exchange in which cost of production plays precisely the same rôle assigned to utility in his previous equations. His argument that the significant fact, however, is utility rather than cost of production, opened up a whole field of controversy which need not be surveyed here.<sup>22</sup> It may be noted, however, that Jevons' position on this question is completely disassociated from his general theory of exchange, and the reasons he gives for his attitude are extraneous to the general run of his analysis. Furthermore, in his brief for the dominance of utility he breaks with his resolution to use the term "ratio of exchange" instead of "value" wherever possible, and his argument seems to be somewhat dependent upon the dubious meaning of the latter word. Finally, it is obvious that his criticism of the "cost of production theory of value" had no bearing upon the prevalent form of that theory, which was simply a statement of admitted facts relative to long-period price tendencies under conditions of free competition.

The central point in Jevons' theory of distribution is his doctrine of interest. It is an indication of the comparative neglect of the latter portions of the *Theory* that only one writer,<sup>23</sup> so far as I know, has credited Jevons with the marginal productivity theory of interest. Not even the similarity of the diagram<sup>24</sup> which Jevons uses to illustrate his theory to those used in recent expositions of the marginal productivity theory seems to have been noticed. In fact, however, there is an important difference between

<sup>22</sup> So far as the validity of Jevons' own arguments is concerned, Marshall's criticism in his *Principles*, fifth ed., Appendix I, seems to me to be definitive.

<sup>23</sup> G. Cassel, *The Nature and Necessity of Interest*, pp. 52-55.

<sup>24</sup> *Theory*, p. 258.

Jevons' statement of the theory and its more recent formulation. Jevons did not utilize the principle of *diminishing productivity* in the way in which it has been more recently expounded. Considering the function of capital to be to extend the interval of time "between the moment when labor is exerted and its ultimate result or purpose accomplished,"<sup>25</sup> he defined capital as the "aggregate of those commodities which are required for sustaining laborers of any kind or class engaged in work."<sup>26</sup> Capital may be "invested in" factory buildings, machines, and other auxiliary instruments of production, but the "stock of capital" is the stock of sustenance. Consequently interest appears as created by a larger product, got when a given amount of labor is distributed through a longer period of time. Moreover, he assumed, without proof, that the product for the same amount of labor "varies as some continuous function of the time elapsing between the expenditure of the labor and the enjoyment of the result." It is to the period of the investment, then, rather than to the amount of the capital invested that he attributes diminishing productivity.

It should be remembered, however, that here, as in his theory of exchange, Jevons is endeavoring to dig below the surface of our money economy. His "investment of capital" is a social process, and not a matter of the expenditures of individual entrepreneurs. The modern form of the theorem of diminishing productivity rests upon the analysis of entrepreneurs' costs. By a somewhat generous interpretation Jevons' theory might be said to imply substantially the facts that are utilized in the modern form of doctrine.<sup>27</sup> On the whole, however, his theory bears a closer relation to Böhm-Bawerk's doctrine of the "technical superiority of present goods" than to the current marginal productivity theory.

Other features of Jevons' theory of distribution need less consideration. He accepts the orthodox theory of rent and propounds

<sup>25</sup> *Theory*, p. 228.

<sup>26</sup> *Theory*, p. 223.

<sup>27</sup> An attempt to show this agreement has been made by H. S. Jevons in Appendix I to the present edition of the *Theory*. A previously unpublished fragment on capital intended to form part of the unfinished *Principles of Economics* is printed as another appendix. Its most interesting innovations are the substitution of "capitalization" for "capital" and the implication that interest attaches only to free capital, fixed capital getting its reward in the form of rent or (as in the case of investments for a man's education) in wages. By "capitalization" Jevons means the amount of the capital multiplied by the period of investment.

a residual claimant theory of wages. He seems to have been led to this latter doctrine by his marginal productivity analysis. Using labor as the fixed, and capital as the variable, factor, wages naturally appeared as a surplus or residuum on the product of all but the final increment of capital. The possibility of treating capital as the fixed factor and labor as the variable seems to have escaped his notice.

Some general aspects of Jevons' use of the mathematical method remain to be considered. The book is probably the best known single brief for the use of that method. But the work itself is mathematical only in a superficial way. Except for its use of mathematical symbols it is, for the most part, mathematical only in the sense that any economic reasoning dealing with changing quantities and ratios is *ipso facto* mathematical. Cournot (to take the best exponent of the possibilities of the method) entrusted himself to his symbols, and by means of strictly mathematical processes reached some conclusions which were neither obviously implied in his premises nor likely to be easily discerned by the ordinary processes of non-mathematical reasoning. There is no question but that some of Jevons' fundamental concepts presented themselves to him as mathematical quantities. But his manipulation of these concepts is for the most part non-mathematical. Jevons was not an accomplished mathematician and he did not think easily in mathematical terms. In some places the awkwardness of his mathematical processes<sup>28</sup> indicates that he is giving a mathematical garb to results reached by non-mathematical reasoning. Such attempts as he makes to develop some of the mathematical possibilities of his concepts are fairly perfunctory. It should also be observed that his use of the differential calculus is more apparent than real. "Final degree of utility," for example, although conceived as a derivative is treated as an algebraic ratio. His equations are also consistently algebraic. There seems to be no reason for questioning Marshall's judgment that "the book would be improved if the mathematics were omitted, but the diagrams retained."<sup>29</sup>

It is difficult to estimate the amount of Jevons' influence, because it is impossible to disassociate it from that of Walras, Sax, Menger,

<sup>28</sup> Cf. especially pp. 127-134 of the present edition.

<sup>29</sup> *Academy*, vol. III, p. 132.



Böhm-Bawerk, Marshall, and others. In England the line of filiation runs clear only in the case of Professor Edgeworth, who has taken Jevons' work for the point of departure of some of his own brilliant developments of mathematical economics, and of Mr. Wicksteed, in whose work we find a rare degree of originality coupled with a faithful adherence to Jevons' general point of view and to some of his leading doctrines. In Italy, where a translation of the *Theory* appeared in 1875, Jevons wielded for some time a considerable influence, but in later years the influence of the Lausanne school seems to be dominant (so far as mathematical economics is concerned). In Germany, Scandinavia and Holland, individual writers such as Launhardt, Auspitz and Lieben, Wicksell, Cassel, and Pierson are to be counted among those who have followed Jevons at one point or another. In the United States, of course, Jevons' influence has been quite overshadowed by that of the Austrians.

It is clear, however, that although Jevons did not bring about the revolution in economic theory which he desired, the current body of economic doctrine is measurably different from what it would have been if Jevons had not written. His doctrines have been absorbed into the general structure of economic theory and reconciled with the political economy of the Ricardian line in a manner which we may suppose Jevons would have neither imagined nor wished. But the position of the *Theory* as one of the four or five great books of nineteenth century English political economy is secure. It retains in a surprising degree the quality of making a fresh and vivid appeal to the reader's interest. Its transparent intellectual honesty and the entire absence of scientific pose also commend it. If only by the dissent which it may compel, it still directs the attention of the thoughtful reader to the fundamental problems of economic theory.

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## OPPORTUNITY COST

One of the most fruitful sources of confusion in recent economic thought lies in the difference between the social and the individual point of view. No economist, the writer believes, has ever carried out a consistent analysis from either point of view; and the result has been a notable lack of clarity. The writer suspects that some thinkers have even shifted unconsciously from one to the other way of looking at things, a procedure which, of course, is fatal to precision of analysis. The difference in scope and function of economic factors as viewed from the often divergent interests of mere individual and social individual permeates all the elementary concepts of the science. The concept of cost, however, is one of the latest to have become involved in the confusion, and it is toward that one element that this article is directed.

The two points of view, social and individual, as involved in cost, may be confused in at least two ways. (1) They may both be adopted without logical discrimination and used in a treatment which on the whole is either "societistic" or individualistic. This is the more common fault. It appears, for example, in a widely used text, through the inclusion in a list of costs of some which are valid only from the one viewpoint and others which are valid only from the other viewpoint.<sup>1</sup> (2) But a no less serious shortcoming is apparent when the one is adopted, not with due recognition of the existence of the other, but as superseding that other. That, too, is confusion in its way. In the past, certain German "Nationalists" and the Frenchman, Sismondi, in belittling analysis which had proceeded from the individualistic viewpoint illustrated, perhaps, such a confusion. Today, those who would supersede the social viewpoint show this tendency. Professor H. J. Danvenport is undoubtedly the most consistent and vigorous representative of the last mentioned tendency, and his brilliant thought in this field has already exerted some influence. The confusion of the first type is witness to this fact.

It is the writer's purpose in what follows to show that the social viewpoint cannot logically be superseded and that a purely individualistic concept of cost is fatal to fundamental economic analysis. For the most part the discussion will run upon the

<sup>1</sup> Ely *et al*, *Outlines*, pp. 125-126; also Taylor, F. M., *Principles of Economics*, pp. 44-51.

significance of the entrepreneur viewpoint with regard to costs and the true meaning of "opportunity cost," so-called; for it is in these particular points that the individualistic confusion of costs appears in most striking form. The one-sided and exaggerated individualism of a few thinkers fails to keep the balance between fundamentals and intermediate processes. Just as there is danger of going too far in emphasizing the significance of money in price determination, so there is danger of overemphasizing the significance of the entrepreneur, and with this danger is associated the more fundamental one of putting the individual's estimate in the place of the forces which determine that estimate. While the most thoughtful representatives of extreme individualistic analysis make qualifications that render it difficult to "pin them down," it is clear that they hold that any attempt to explain price on the supply side "is hopeless unless in terms of constant reference" to entrepreneurs' "opportunity cost,"<sup>2</sup> and that the supply of factors in any industry together with the outlay for them is determined *for the most part* by "the relative remunerations possible in competing industries or under competing employers."<sup>3</sup>

The writer will endeavor to demonstrate: (1) that this reasoning begs the point in question in economic analysis; (2) that the so-called "opportunity cost" is not a cost in any true or price-determining sense; and (3) that the importance of the entrepreneur viewpoint, being quite secondary, has been exaggerated and made the basis of serious error.

(1) The burden of the extreme individualistic analysis, is the relation of cost to value or price. Yet in dealing with this relation it is tainted throughout by that plague of logic, question begging. Is it not obvious that no fundamental examination of a relation can be completed where one element of the relation is taken for granted? Now the individualistic or entrepreneur analysis takes price for granted. Perhaps this is most notable in the reasoning on "opportunity cost." Here the burden of the argument is that costs are largely, if not entirely, relative sacrifices and are determined by the alternatives or opportunities which are open to a producer. Costs, to economists of this type, seem measured by comparing one "advantage" with another or by balancing the

<sup>2</sup> Davenport, "Cost and Its Significance," *AMERICAN ECONOMIC REVIEW*, vol. I, p. 743.

<sup>3</sup> Davenport, *Value and Distribution*, p. 382, n.

"desirabilities" of two employments. For example, an entrepreneur is assumed who sells hats which involve "outlay and trouble" equivalent to \$1.75 (assumed), at \$2 (assumed), thus getting a profit of 25 cents on each hat. If, with the same "outlay and trouble," the entrepreneur could sell shoes at \$1.90 (assumed), the price of hats could not fall below \$1.90 without his leaving the hat business. Therefore his cost is \$1.90—not the "outlay and trouble." At \$1.90 the hat man would be a marginal producer; marginality is thought of as a matter of relative "gain."

But it will be observed that what is compared here is "gain" or "advantage." Now gain or advantage is a net concept; it depends upon a comparison of outlay and trouble on the one hand with price income on the other. It can be conceived of in no way but by taking for granted the price from which the income (the excess of which measures gain) is derived. How, then, can one thus gravely set about basing the costs which are to enter the entrepreneur's business plans upon a calculation which assumes the prices which he is to get for his products? The very question is to learn how costs enter the determination of prices. The answer begs the question.

To make the same point a little more concretely, take the hat-shoe illustration. The \$2 per hat is the exchange value of the hat stated in terms of a money medium; so also is the \$1.90 received for shoes. How does the \$1.90 affect the \$2? Why is it not \$2.25 instead of \$2, or \$1.75 instead of \$1.90? Granting competition, most economists would answer: "because these amounts would be either in excess of or below costs." The established analysis, in a word, regards costs as absolute quantities of sacrifice.)

The opportunity theorist says, when hats fall to this alternative shoe price of \$1.90, the hat producer with the alternative will be on the margin—will be a marginal hat producer. But a marginal increment, if of any determinative significance, is one in which marginal utility and marginal disutility coincide and which sells for just enough to cover expenses; whereas the \$1.90 hat man is still making 15 cents above absolute costs, and his shifting can neither stop a fall in the price of hats to \$1.75 if the demand for hats continues to decrease, nor a similar fall in the price of shoes under similar conditions. In assuming that the alternative is a margin, the reasoning overlooks the fact that marginality in production is an absolute condition set by effective desires of buyers

and the expenses of producers, and so allows the price quality to creep into that which it would make price-determining. Alternative or "opportunity" is a mere index. The alternative and the price and the margin are all contemporaneously determined by the same forces. The true significance of the "opportunity" margin appears from the fact that it *always* comes into play *after* prices change.

The fact that this relative, so-called "opportunity cost" begs the question by assuming value, may be brought out in another way. The procedure followed by these who would illustrate this cost is more complex than is always apparent. It involves at least three comparisons: (1) the utility of one alternative is compared with its cost; (2) the utility of the other alternative is compared with its cost; (3) finally the net results of comparisons 1 and 2 are themselves compared. Thus the net results of two alternatives are judged and evaluated. In the first two comparisons, value is involved. Questions like this of *net* quantities are always, questions of value. Indeed this opportunity-cost basis is not a cost basis in any ultimate sense; it is a matter of relative *values*.

Professor Davenport admits there is some circularity in the opportunity-cost analysis, but states that such costs cannot be said to draw their value as costs from the value of that very product in the production of which they function as costs. In view of the simple facts of the case as stated in the preceding paragraph, however, it is evident that a large part of the value of such costs is drawn from that very source. "Opportunity costs" have no meaning at all unless the values of the products involved are compared.

But the thought occurs to one, "Is this, after all, not a special case of the doctrine of comparative costs? And are comparative costs not costs?" In answer it may be stated at once that that doctrine in no way reduces the importance of absolute costs, for the relative quantities compared are based on absolute costs. Moreover, it, too, takes price for granted. Take two nations, A and B, one of which, A, can produce both hats and shoes cheaper than the other, but has the greater advantage in hats. That nation, A, will produce hats, and secure its shoes, possibly by trading hats for the product of the other nation, B. Has any one ever thought that the price of shoes in nation B is a cost to nation A?

The defender of "opportunity cost" points out that certain

economists appear to recognize such a cost in that they say that a minimum profit is set by what entrepreneurs could get as wage-earners. This statement is not without foundation, and the writer would here call attention to the fact that unless carefully guarded, the discussion of minimum profits so common in our texts<sup>4</sup> is open to the same criticism as is the "opportunity-cost" notion in general. The trouble sometimes lies in a confusion of wages with profits. If the two are the same sort of return, then they shade into one another and have a common margin of determination. As profits, in this way of regarding them, decline, the entrepreneur at a certain point ceases to get anything but wages. Obviously, however, if profit is to be an independently determined share, this reasoning will not suffice. If we are to retain entrepreneur responsibility as a separate factor, it must have its separate absolute margin of determination, just as labor and capital-formation do, and as long as there is a return in the shape of profits, which covers the costs of independent responsibility for a business unit, so long may the entrepreneur stick to his post without price-determining loss. He will be a marginal entrepreneur in that his peculiar costs as entrepreneur are just covered by his peculiar income. Now both entrepreneur and capitalists may be able to labor and make good wages. If so, they have alternatives as wage-earners. But there we must apply the analysis of the third paragraph preceding. If the surplus of price-determined income over absolute costs as entrepreneur is less than the surplus of wages income over labor cost, then the entrepreneur may give up his business responsibility. But no price-determining significance attaches to the wage advantage. It is price-determined and merely an index of the forces of demand and supply in the labor market, just as is the relation of profits to entrepreneur's cost in the entrepreneur ability market.

Certainly the situation here is complicated by the fact that we are dealing with factors of production the demand for which is reflected back from products they unite to make—a kind of "composite demand."

The "opportunity-cost" idea is essentially the same as that of alternative land uses, and the relation of both to price is identical. In a paper on "Rent and Price: Alternative Uses,"<sup>5</sup> the

<sup>4</sup> Seager, *Introduction to Economics*, p. 159.

<sup>5</sup> *Quarterly Journal of Economics*, vol. XXIV, p. 127 ff.

writer recently pointed out that this question of alternative (or opportunity) costs or supply limitations cannot be treated apart from price, and that, when so treated, the alternative becomes effective only *after* price has been determined. To paraphrase the words used in the article: "If A is debating whether to put his capital to making hats or to making shoes (outlay and trouble being the same), the decisive thing is the price to be expected for each utility. This determines what his gross returns would be in either employment. It then remains to figure on his expenses, among which he may count his alternative. But the question is, not what A figures are his expenses, but *what determines this alternative?* and what is its relation to the price which A has *counted upon?* If the opportunity theorist would set his "opportunity costs" over against opportunity utilities he would not be able to fall into the error of confusing the value with the cost. Once more, one cannot deal with such concepts as net gain, relative advantage, etc., without having passed into the field of value, and having begged the question.

(2) In what has gone before, the reasons for denying significance to "opportunity cost" as an element in determining value have been implied. The writer, however, would like to state them more formally, and to go further in criticising the "opportunity-cost" idea.

In the first place, the significance of cost is that it is a limitation upon production and supply and so is an ultimate factor in causing and determining value. But even granting for the moment that opportunity might be called a cost, "opportunity cost" has been shown to be the *resultant* of value conditions, and to depend upon the existence of alternatives which are themselves determined by cost limitations and demand. Consequently it cannot logically have the significance of other costs in value determination.

In the second place, however, the writer cannot believe that opportunity constitutes a cost. A first simple illustration taken by Professor Davenport is not happy. A child having been given a peach and a pear is forced to give up one in order to retain the other; therefore the one is the opportunity cost of the other. But there is no opportunity here—opportunity in the sense the word is used generally by Professor Davenport. No "competitive analysis" exists in the case. The alternatives are: give up one or give up both. The robber offers you the opportunity of "disjuncting"



your money with your life. If you happen to have much money your life costs much; if not a cent, you are cheap. (Will your neighbors' estimate be changed in either case?) Again, no outlay and trouble were involved in the child's acquisition of the fruit; the supply of fruit is not affected; the prices of pears and peaches remain unchanged. The case involves mere subjective worths and has no objective validity. Professor Davenport does well to admit that: "the term *cost* seems not quite satisfactory to cover the case." He suggests that "foregoing" would be better. But what is foregoing? The child is "out" a peach, but that fact is through no foregoing. If the peach had been spoiled or lost, the same situation would have existed.

In another illustration we are told that if, having a dollar which you have earned, you choose to purchase a book rather than a knife, the cost of the book is best said to be the knife. It is suggested that some term like displacement or foregoing would be better. But what is displaced or foregone? Is it the knife? If so, are we to suppose that, if you had also happened to think of a circus ticket, a shirt, a different book, etc., *ad infinitum*, your "foregoing" would have been infinitely increased? Truly, you would then be paying dear for the whistle! And, above all, why can the book displace anything? Is it not only because it has a certain value? How could the knife ever displace the book? Is it not because its value is to be assumed? What is being displaced in either case? Surely not the physical thing. And what *sacrifice* is involved in the displacement? No. It is your dollar—your day's ease—which is displaced or foregone. As to the knife, the situation is simply a comparison of utilities, and you choose the thing possessing the highest marginal utility. You choose the course involving the least sacrifice, meaning the greatest want-satisfaction as compared with the sacrifice of your day's earnings.

Or, take the case of a producer with an alternative occupation. The simple, hard-headed query that first enters one's mind is, "Are a man's costs greater merely because he happens to be able to do several things?" And the hard-headed answer is, "No." Assuming competition, the alternative, as such, results in no sacrifice. He merely chooses the course showing the greatest net return. A and B are two producers, each operating with the same outlay and trouble. A has an opportunity in the shape of an alternative employment; B has none. Whose product sells for more? Both

get the same price. Is A's gain less than B's because the opportunity theorist would reckon his costs as outlay and trouble *plus* opportunity? Their gains are the same. But, finally, you ask, if prices fall will A not drop out when his opportunity becomes more attractive, just as if his costs were outlay and trouble *plus* opportunity? Yes, he will drop out; but in putting the question you have indicated that it is no cost that determines his dropping. You will observe that the occasion for dropping is price-determined; and that the only thing which one could call a cost, in any reasonable use of the term, would arise only if A should refuse to drop. If he should cling to the less gainful alternative or opportunity there might, indeed, be a foregoing, just as if the child had tried to cling to both pear and peach and so sacrificed his chance to save one.

In fact, to the writer, it would seem more reasonable to say that opportunity comes from cost than to argue that cost comes from opportunity; for the opportunity depends in part upon relative costs, and in itself is in no wise to be reckoned as cost.

The essence of cost is sacrifice incurred in order that economic utilities may be created. Now to the writer the sheep's clothing of opportunity seems out of place on the wolf, cost. But more than that, it has not the significance which outlay and trouble have in production. Mere opportunity never created an economic utility. It takes work applied directly or indirectly to "make things." If A's prices fall, A's business becomes less productive to him—less productive of net income to A. He takes up an alternative business. Someone says he is more productive. In the ultra-individualistic sense he may be; but why? Once more, it is because his outlay and trouble in the new line are less, relatively to price income, than in the old one. And this is true not because of the opportunity, but because of the relation between the absolute conditions of outlay-and-trouble-cost and marginal-utility-demand in the two lines. Cost in the generally accepted sense bears a causal relation to utility output. Opportunity, in the last analysis, bears no such relation.

(3) As just indicated, the significance of cost lies in its connection with production, and it is essential to note that the case for "opportunity cost" is inseparably associated with an unusual and inexpedient notion of production. Production in the generally accepted sense consists in the adjustment of the materials and forces

of nature so as to make them better gratify human wants. This definition accords with a social viewpoint, as it includes all net additions to the economic utilities of a society, while at the same time it is not in conflict with a recognition of individual acquisition through exchange. But the ultra-individualistic definition would include all individual gain-getting whether by trade or theft, exchange or arson. Moreover, it holds that a thug who robs men of pocketbooks undergoes costs of production equal to watches (is he not foregoing those golden "opportunities"?) and "produces" gain for thugs. Obviously there is no exchange here, and the important distinction between group life and individual existence is ignored. Opportunity can be conceived of as cost only in a short-sighted, ultra-individualistic notion of production. It would almost seem that the notion of "opportunity cost" has been invented in order to make cases of supply like the child's fruit or the burglar's loot seem to come under some law of cost determination. The burglar business is obviously one in which little relation can exist between outlay-and-trouble cost and the result. So with the other sources of income which are not on an exchange basis.

A logical result of the "opportunity-cost," entrepreneur analysis appears in the treatment of exchange and competition. Freedom of exchange has always been given an important place as a desideratum in social economic analysis, but Professor Davenport and his followers are tending to take away this place. Obviously an economy in which robbery and bribery are deemed productive cannot be one based on exchange, for nothing is exchanged in such activities. It is one-sided economy. Now freedom in exchange is a corner stone of competition. It is natural, then, that we find an insistence upon the productivity of monopoly and a tacit abandonment of competition at points. Thus, while A (a hat maker) can make both hats and shoes, and the less gainful line forms A's cost for the other, we are to infer that B (a shoe maker) is not free to make hats. If the analysis were really competitive, however, capital, all or in part, would be free to flow into either industry from the other, in no great time. Then B would have the \$2 hat price as an opportunity (cost) and would be producing shoes (at \$1.90) at a loss of 10 cents a pair! Or, assume a series of drops in the price of hats: hats having fallen to \$1.88, A takes up the shoe business; the price of shoes then falls to \$1.80, and he passes back into hats; and so on, till when?—till the \$1.75 "outlay-and-

trouble cost" is reached. With competition it would be the decisive thing. Thus we may conclude that the "opportunity-cost" analysis only pretends to work one way, and is not competitive analysis. And this, together with the conclusion that it is associated with an ultra-individualistic notion of production and an anti-social attitude toward exchange, makes a severe indictment against the whole scheme.

The upshot of this phase of the criticism is that price-determined "costs" (so-called) are worth mentioning only in an individualistic, non-competitive, acquisitive way of looking at things. Granted that "opportunity cost," like rent, *seems* to the individual to be a motivizing resistance in his economy, are we to stop at the shadow? Are we to confuse the index with the forces which it registers? If so, then it is easy to overlook long-time matters and the significance of technological limitations on production, to regard robbery and exchange as equally productive, and to accept "opportunities" as costs of production—otherwise impossible.

As to the secondary importance of the "entrepreneur viewpoint" of recent American thought, let the opportunity theorist speak for himself. "He (the entrepreneur) takes wages as he finds them, rents as the market presents them, interest rates as he must pay them, and so on; . . . . . Nor is it any part of his problem to investigate the causes of the prices attaching to his alternative line of production. . . . . it does not lie with him to change them . . . . ." <sup>6</sup> He adds that the entrepreneur's view of the facts is a superficial view. This being the case, one may well wonder why such insistence upon the entrepreneur and his "opportunity costs." Why not go back to the real thing?

The same theorists insist, however, that the value problem must be attacked from the entrepreneur viewpoint, "because here is the problem presented in terms of results which the ultimate causes have worked."<sup>7</sup> Now the reader notes that all through the subtle windings of the argument the opportunity theorist emphasizes the fact that "opportunity cost" is an entrepreneur phenomenon and constitutes a large part of entrepreneur's costs. But "opportunity cost" is far from ultimate, and Professor Davenport himself at one point states that it is "plainly superficial." In a word, we are told that an admittedly nonfundamental entrepreneur analysis,

<sup>6</sup> Davenport, "Cost and Its Significance," *op. cit.*, p. 736.

<sup>7</sup> *Ibid.*, p. 746.

based largely upon a nonfundamental "opportunity-cost" concept, presents the results of ultimate causes! The true conclusion which seems to follow from the preceding estimate is that the value problem is not presented in terms of results which *ultimate* causes have worked out. When it is stated that "modifications in the relative supplies of goods come about through the working out by the entrepreneurs of their individual cost computations,"<sup>8</sup> the statement either means that entrepreneurs' costs (including "opportunity cost") help determine supply, or it means next to nothing. If the former, then a conclusive dilemma arises in which one horn is the insignificance of "opportunity cost" and the other is the futility of the entrepreneur viewpoint in value and distribution, though in reality these horns are not necessarily alternatives.

Needless to say, it is the writer's conclusion that entrepreneur's cost is to be sought in the risks attendant upon responsible direction of a business unit, and that this cost is a fundamental one, limiting supply as does labor pain.

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<sup>8</sup> Davenport, *op. cit.* p. 746.

## REVIEWS AND NEW BOOKS

### General Works, Theory and its History

*Principles of Economics.* By F. W. TAUSSIG. Two volumes.  
(New York: The Macmillan Company. 1911. Pp. xxxv,  
547; xviii, 573.)

Seldom does a writer state the purpose of his work more clearly than does Professor Taussig in the preface to his *Principles of Economics*; seldom does a writer accomplish his purpose more precisely than Professor Taussig has done. The words "more precisely" are well-considered, for in the main the author limits himself in his work to his expressed intention, giving, however, full measure; and in a few places going even beyond what he promises. It is then well to begin a review with a presentation of the main points in his own statement.

"I have tried in this book to state the principles of economics in such form that they shall be comprehensible to an educated and intelligent person who has not before made any systematic study of the subject. Though designed in this sense for beginners, the book does not gloss over difficulties or avoid severe reasoning. No one can understand economic phenomena or prepare himself to deal with economic problems who is unwilling to follow trains of reasoning which call for sustained attention. I have done my best to be clear, and to state with care the grounds on which my conclusions rest, as well as the conclusions themselves, but have made no vain pretense of simplifying all things.

". . . Some topics to which economists give much attention in discussion among themselves receive scant attention or none at all. I have omitted entirely the usual chapters or sections on definition, methodology, and history of dogma; and have said little on such a topic as the subjective theory of value, which in my judgment is of less service for explaining the phenomena of the real world than is supposed by its votaries. These matters and others of the same sort are best left to the professional literature of the subject. I hope this book is not undeserving the attention of specialists; but it is meant to be read by others than specialists."

Professor Taussig's book can be warmly commended to the general reader. It presents clearly and concisely the main conclusions reached by modern economists and gives the rational basis of their conclusions. It is designed as a guide for thought and action, and the author takes the position that it is desirable to apply the pragmatic test of truth in economics, *viz.*, that it works out satisfactorily in actual life. Notice, for example, the final

words of the chapter on the Nature and Definition of Capital, in which he gives reasons for a differentiation between interest and rent as distinct categories:

"... Economics is in a special sense a pragmatic subject. Its truths are eminently truths in the sense that they concern us. Its answers are answers that declare what we should do. As to any question of classification and distinction, the test of truth is, what of it? what follows? In economics the consequences that follow are ultimately consequences for general welfare and public regulation. So considered, the question whether income-yielding property is homogeneous, and all the sorts of income essentially of the same sort, is to be answered in the negative."

No modern treatise can be pronounced more unreservedly "safe and sane," and these words are to be taken as high praise. Common sense characterizes the entire treatise in such an unusual degree as to make the common sense something after all not common—to paraphrase a familiar expression. Again and again Professor Taussig cuts a Gordian knot of theoretical refinements by common sense. His discussion of index numbers serves as an illustration. He discusses the arithmetic average, the weighted average, and the geometric mean and then shows that the simple arithmetic average is as satisfactory as it is easy. (Cf. I, pp. 292-4.) His treatment of money is likewise a thoroughly common sense treatment which must appeal strongly to the man of affairs. After discussing the highly theoretical proposal of international paper money which should replace specie, Professor Taussig dismisses it all in these words: "The change is not unthinkable, and it appeals to those who like abstract speculation and ideal construction. As a proposal of anything practicable, it is not worth discussion." (Cf. I, p. 326.) Of similar character is his objection to convertible government paper as a dangerous device, the disadvantages of which outweigh the advantages.

When it is said that the work under discussion presents the conclusions of economists, it is not meant that all economists would assent to all conclusions. While dissent to many propositions must be expected, it is true that for most purposes of direct concern to him the man of affairs will find assent to Professor Taussig's proposals and views among the great body of economists in this and other countries; and no other book better illustrates the progress economics has made during the past quarter of a century. Views are presented in nearly every chapter which would



have awakened loud protest twenty-five years ago and led to denunciation of their author as a dangerous theoretical and practical man but which now pass unchallenged. The pragmatic and therefore ethical position taken, the treatment of trade-unions and the closed shop, the fair-minded discussion of bimetallism and paper money, the attitude towards theoretical socialism and the concessions to the protective tariff, all afford illustration which could be multiplied indefinitely.

Professor Taussig holds no brief for any economic class or party, but is striving simply for truth. If timidity is suggested in the book, it is not with respect to any practical application of economic truths, but with respect to pure theory. Undoubtedly Professor Taussig is a careful rather than a bold thinker. At times, indeed, it seems to me Professor Taussig goes too far in concessions to practical programs of reform in his endeavor to be fair. As instances, I would cite his concession to the single tax and the opponents of private property in land. It would have been well to point out more clearly how the single tax might be expected to affect the interests of small property holders and for the great masses the prospects of becoming owners of property. I would cite also his concessions to those who argue in favor of something approaching equality of incomes, while fully endorsing all that is indirectly and by implication said against the extent of present inequalities. The argument that high wages and salaries far above average incomes are in very many cases returns, full or partial, for high cost of producing these services, could well be amplified and strengthened. Who has the better chance of saving a part of his income, a university instructor with an income of \$1,500 a year, or a stone-mason with the same income?

Among the many things I would be glad to quote are excellent passages on inequality and maximum human happiness found on pages 136 and 137 of volume I.

It is difficult to criticise the book theoretically, and that precisely on account of its nature. Intentionally, contentions of interest primarily to scholars are largely omitted, and attention given to practical points of agreement. A theoretical critique, if exhaustive, would be of great length, for it would necessitate the treatment of endless detailed points, as the book is characterized by no large outstanding and possibly epoch-making theories. Among the views with which I am especially inclined to take issue

the following may be mentioned; the importance attributed to large-scale production *per se* in limiting competition—and that without any satisfactory proof or intimation of proof in deductive or inductive reasoning. And naturally enough, in connection with this I feel that the whole discussion of monopoly might have been more clear-cut and that more sharply defined conclusions could have been reached.

The scope of economics as presented by Taussig is far wider than American and English economists accepted twenty-five years ago, the enlargement being found particularly in its ethical and teleological aspects, and yet in my opinion it is too narrow. Especially does the book suffer, in my opinion, by a neglect of any theoretical and practical discussion of public expenditures; for surely if distribution belongs to economics, public expenditures must be a part of economics, for it is through public expenditures that a large and ever-increasing social income reaches us. One year we pay for sweeping the streets in front of our houses by a private contribution; the next year we pay for it in a tax, and the public expenditure resulting gives us the service. The line constantly fluctuates between private and public expenditures, and these affect appreciably wages and salaries. At times, we could suppose that Professor Taussig considered the expenditure of wealth collected by taxation of no vital significance. (See in this connection pp. 548 and 549 of volume II.) When he discusses the minimum of interest in relation to taxation, he does so without reference to the use made of the wealth collected. Let us suppose that half of the money I receive in interest is taken by taxation, and the expenditure of that half is of no direct material benefit to me. Now let us suppose that that expenditure relieves my private budget by the whole amount of the tax in providing clean streets, good sanitary conditions preventing expensive illness, in furnishing free public schools in the place of private schools with high tuition, etc. Must not that be taken into account? I do not believe, for my part, that we can have an entirely satisfactory theoretical discussion of production, nor of distribution, if, in the present age of the world, expenditures are neglected; and also I believe that unfortunate practical consequences may result therefrom.

Professor Taussig's style is on the whole lucid and pleasing, and that makes the more regrettable occasional unfortunate slips and

mannerisms, of which the incessant repetition of "whether or no" is one of the worst. The publishers, however, deserve a word of criticism for putting out so poorly printed a book; the frequent omission of letters in words being the worst fault to be noticed.

The critique has necessarily been general in character, the nature of the book compelling this. In conclusion, I do not hesitate to congratulate the author on his success; the intelligent business man and the public man on having so reliable and readable a guide; and American scholars on the noteworthy achievement of one of their number.

RICHARD T. ELY.

*University of Wisconsin.*

*The Science of Wealth.* By J. A. HOBSON. Home University Library, No. 11. (New York: Henry Holt and Company. 1912. Pp. viii, 256. \$.75.)

In this volume Mr. Hobson gives a concise account of the structure and functioning of the modern industrial system. The method and results of the author's earlier work, *The Industrial System*, are here repeated. In the first four chapters is presented a schematic view of the industrial system, designed especially to show the interdependence of industries and of productive functions. This is followed by an analysis of distribution in terms of "costs" or maintenance charges for labor, managing ability, capital and land; "productive surplus," or additional payments necessary to evoke quantitative increase or qualitative improvement in production; and "unproductive surplus," or rents, excessive profits, interest and wages, which ends in uneconomic or wasteful consumption. Chapters 7 and 8 deal with wages and profit in the concrete. The latter expresses the author's conviction that a large part—perhaps the major part—of the unproductive surplus takes the form of entrepreneur's profits. Chapters 9 and 10 give an elementary statement of the forces governing prices; chapter 11 treats of socialism and the labor movement, and lays the basis for the author's favorite doctrine that the unproductive surplus is the one appropriate and adequate source of public revenue. Graduated income taxes and inheritance taxes are proposed as the most feasible means of reaching the unproductive surplus. A state must, however, proceed cautiously in its plan of confiscating the surplus, since otherwise much capital would migrate to more friendly states.

In chapter 12 we find an unusually clear presentation of the case for free trade, in the guise of an analysis of the historical situation of a community established a century and a half ago in southern Ontario on both banks of a river destined later to become an international boundary line. The greatest freedom in the interchange of commodities and of labor and capital was to the advantage of every person dwelling on either side of the river, before the political boundary was erected; after that event the economic facts remained unchanged. It does not matter that Hobson's geography and history appear to be purely economic; his argument, obviously enough, holds good. The only question is whether such a community, practically homogeneous, typifies the international situation.

The book as a whole is remarkably well conceived and well executed. With the exception of the doctrine incidentally expressed on page 167, that free competition would reduce all prices to the level of cost (*i. e.*, maintenance charges for labor, ability, capital and land) the book is free from fundamental error. Mr. Hobson is here concerned with presenting his own system in the least possible space, and a very satisfactory system, on the whole, it appears to be. This is not his most profound and suggestive work, but it is his most logical one. It is designed as an introduction to economics for the general reader, and it is adapted to serve the purpose well.

ALVIN S. JOHNSON.

*Cornell University.*

*The Theory of Distribution and Consumption.* By T. LLOYD, (London: James Nisbet and Company, 1911. Pp. xiii, 508. 15s.)

This work, originally in greater part contributed to "The Statist," is not a treatise on any branch of economic theory; it has a general sociological purport solely. The term distribution scarcely occurs anywhere, except in the title, and is used as synonymous with consumption. Near the beginning (p. 18) we are told, "The real cause of greatness is the character of the people; and the main thesis of the present work will be an inquiry into the causes which produce the character that makes a people exceptionally prosperous and great." Such a loose-jointed concept of a "thesis" is an indication of the amazing encyclopedic performance that follows.

The author ranges from one end of the British Empire to the other, praising all good works and adversely criticizing all social arrangements that he finds amiss. His information is prodigious, and his critical comments and proposals for reform almost uniformly display good sense. Improvement in education, better land systems, well organized poor relief, adequate care of the public health, the avoidance of the pitfalls of protectionism, and above all the maintenance of the world's peace, will result in a state of things in which the consuming power of the people will be greatly increased and hence will insure an increase of production on a sound basis and, in general, a high state of prosperity. For some reason which is not made clear this is the way to go about it and not by operating on increased powers of production directly and in the first instance.

In other words, the aim of civilization is to increase prosperity; this rests upon the general state of social health which in turn maintains the character of the people and so enhances their purchasing power or power of consumption. The orthodox economists were in error in concentrating attention on increased powers of production, for "it is consumption that sets the economic machine in motion."

C. W. MIXTER.

*University of Vermont.*

*Die logische Natur der Wirtschaftsgesetze.* By KIICHIRO SODA. Tübinger staatswissenschaftliche Abhandlungen, 17. (Stuttgart: Verlag von Ferdinand Enke. 1911. Pp. xv, 130. 5 m.)

Dr. Kiichiro Soda is not a German, but a native of Japan. He first made the acquaintance of economics through Fawcett's text. His reaction from this exposition of the rigidity of economic laws found congenial soil when he reached Freiburg and listened alternately to Professor Carl Johannes Fuchs in economics and to Professor Henry Rickert in philosophy. He presents himself as a member of that younger generation which is called upon to resume the examination of the appropriate foundation and method for political economy.

The author contrasts the conception of law in the natural sciences with its conception in history; in the former sense it aspires to be more independent of time and place, and can well be more dogmatic, while in the latter sense it aspires merely to throw light

upon a particular historical situation and explain it as a thing unique in itself. The author's contention, in view of this analysis, is for a conception of economic law as including both these other concepts: it is indispensable that economists seek generalizations, but these will be more efficient if it is borne in mind that they are not an end in themselves, but a means, an indispensable means, to the further interpretation of life, like the generalizations of any other social science, and having a more modest purpose than "the theory of all things." An economist, in short, must live with a very real sense of the immanence of the whole universe, but must not let himself be swept, by this reflection, into undue abstractness or pitiless confusion. He will help in the making of intellectual progress if he define his terms and state his laws; then whoever does the revising will not only know what he is about and be able to step carefully, but will also be able to make explicable to other philosophers where the contribution belongs. And as the central thought, the sheet-anchor of economics, the author puts forth the conception of money, by which he means not only the theory of money in the more technical sense, but the framing of concepts and generalizations with a strict view to their relevance to the price situation, markets, and exchange generally. Thus the law of increasing or decreasing returns, often stated in such a way as to be merely technological, acquires the status of an economic law only if its relevance to prices be manifested in some explicit way; and the conception of rent—one that has bothered the author ever since the days when he studied Fawcett—must be eviscerated of any technological content, such as bushels of corn or heads of cabbage, and tied fast to a price situation, it being the price of something.

The book will appeal to but a narrow circle of readers—those who have a mastery of German, a very special interest in methodology, and who are familiar at once with the literature of the subject and the terminology of logic. Whether or not they are adequately rewarded, they will at least find a study that is not merely perfunctory, that takes pains to say carefully what it means, and that appears to contain flashes of real insight.

CARL E. PARRY.

*University of Michigan.*

*Die Theorie vom Arbeitslohn.* By ALEXANDER BERNER. Rechts- und staatswissenschaftliche Studien, XLIII. (Berlin: Verlag von Emil Ebering. 1911. Pp. 174. 4.50 m.)

The results of a comparative study of recent literature upon the theory of wages are here set forth. German, French, English, and American economists are taken up in turn, their opinions analyzed, and the value of their contributions to the theory of wages appraised. Among the Germans, the author distinguishes four schools of economic thought: the deductive, exemplified by Böhm-Bawerk; the historical, exemplified by Schmoller; the eclectic, with no outstanding leader; and the socialist, from which he selects for consideration Bernstein and Oppenheimer. The Böhm-Bawerkian theory of wages he deems a sketch only, the details of which were filled in by the American, Taussig, and defers judgment accordingly. The historical school, he finds, has no theory of wages; and the eclectic school is better represented by Marshall.

Of recent French writers, he dismisses most as neo-classical "Productivists," such as Leroy-Beaulieu, Levasscur, and Chevalier. Gide, he classes with the German historical school; and Cornélissen, the only French economist of the Austrian school who receives any consideration, is rejected as too "theoretical" and inadequate. Among English writers, Marshall alone receives extended discussion. The author concludes this portion of his task with the observation that Marshall's theory of wages is "too sweeping a generalization" and "without much significance for practical purposes."

Coming across the Atlantic, Taussig, Clark, and Carver are the economists selected for study. Carver is dismissed as "so similar to Marshall as not to require special consideration;" Clark is too "unworldly," and Taussig's theory is "neither favorable to capital, nor favorable to labor, because it has absolutely no relation to the manifold phenomena of reality." The author's final conclusion is that no general theory of wages is possible, and he quotes with approval Bernstein's doctrine that the problem of wages lies in the realm of sociology, and cannot be confined to that of economics.

The author's position as an economist is adequately indicated by the foregoing quotations. The American reader seeking a manual of the contemporary economic theory of wages will find little in the book that cannot be found in more available and more satisfying form elsewhere.

*Harvard University.*

A. N. HOLCOMBE.



## NEW BOOKS

- BRAUER, K. *Kritische Studien zur Literatur und Quellenkunde der Wirtschaftsgeschichte*. (Leipzig: Veit & Comp. 2.40 m.)
- BROUILHET, C. *Précis d'économie politique*. (Paris: P. Roger & Cie. 1912. 10 fr.)
- BUDGE, S. *Das Malthus'sche Bevölkerungsgesetz und die theoretische Nationalökonomie der letzten Jahrzehnte*. (Karlsruhe: G. Braunsche Hofbuchdr. 3.50 m.)
- BURCH, H. R. and NEARING, S. *Elements of economics, with special reference to American conditions, for the use of high schools*. (New York: Macmillan. 1912. Pp. xvii, 363. \$1.00.)  
To be reviewed.
- COLSON, C. *Organisme économique et désordre social*. (Paris: E. Flammarion. 1912. Pp. 364. 3.50 fr.)
- FETTER, F. A. *Source book in economics*. (New York: Century Co. 1912.)
- FLURSCHEIM, M. *Over-production and want. The economic and social problem and solution*. (London: W. Reeves. 1912. Pp. 278. 2s.)
- GIRAULT, A. *Programme d'un cours d'économie politique professé à l'Université de Poitiers*. Third edition revised; bibliographical notes. (Poitiers: A. Masson. 1911. Pp. 61. 2 fr.)
- HERCKENRATH, C. R. C. *Die ökonomischen Bedingungen des sozialen Lebens*. Vol. 1, *Bedürfnis, Genuss und Wert*. (Munich: J. Schweitzer. 1912. 4.50 m.)
- LABRIOLA, A. *Il valore della scienza economica*. (Naples: soc. ed. Partenopea.)
- MASSLOW, P. *Die Theorie der Volkswirtschaft. Einführung in die politische Oekonomie*. (Leipzig: A. Kade. 1912. Pp. viii, 293. 6 m.)
- RICHARD, G. *La sociologie générale et les lois sociologiques*. Encyclopédie scientifique. Bibliothèque de sociologie. (Paris: O. Doin et Fils. 1912. Pp. 400. 5 fr.)
- SOHLICH, K. *Lehrbuch der Volkswirtschaftslehre, einschliesslich der Hauptpunkte der Finanzpolitik*. (Strelitz: M. Hittenkofer. 1912. Pp. iv, 46. 2.50 m.)
- SPENCER, F. H. *The student's guide to political economy*. (London: Pitman. 2s. 6d.)

## Economic History and Geography

*The Kentucky Mountains. Transportation and Commerce, 1750-1911. A Study in the Economic History of a Coal Field.* By MARY VERHOEFF. Filson Club Publications, No. 26. (Louisville: John P. Morton and Company. 1911. Pp. 208.)

The author has selected for study that part of Kentucky known as the Cumberland Plateau, or the mountainous region in the eastern part of the state. Its topography is such as to make it almost inaccessible, except by expensive transportation systems, as it is not only mountainous, but is broken by a perfect network of water-courses, ridges, and valleys extending in every direction. Fully fifty per cent of the surface is not adapted to cultivation, but in all of the thirty-four counties in the district coal is present, as well as other mineral resources. The population has received few additions from outside since the first settlement of the district, and is therefore very homogeneous and ethnically one of the purest in the United States. Their speech still savors of the sixteenth century. But this very isolation, combined with poverty, intemperance, bad housing, and poor food, has brought about a marked deterioration, and renders the typical mountaineer unfit for modern industrial labor. The salvation of this people lies in making the region accessible to civilizing influences. Economic forces are gradually effecting this, as the railroads are pushing in to the coal fields, but as yet only the counties on the margin of the district have been touched. The great problem of the Kentucky mountaineer has thus always been and still is the question of adequate means of transportation. This fact is clearly brought out by Miss Verhoeff's study.

Except for a concise introduction, in which the natural features and the population are described, the body of the monograph is devoted to an account of the mountain roads. But, after reading of the efforts of one hundred and fifty years, one lays down the book with a feeling of surprise that so little has been accomplished in that time. The original method of constructing roads, by means of a labor tax, adopted from Virginia in 1785, still persists with little modification. With the movement for internal improvements in 1835, Kentucky instituted a state board of internal improvements, and by 1850 it had expended \$206,000 on roads, which Miss Verhoeff thinks "considerable." In addition to this the state invested \$2,694,000 in turnpike companies. A few roads were

built by private enterprise, and the counties doubtless did something, but of this no account is given, the study being confined to state undertakings. The larger part of the volume is concerned with details of legislation about individual roads traced with painstaking care from 1750 to 1850; for the period 1850 to 1911 only twelve pages are allowed. Possibly this is reserved for the second volume.

Miss Verhoeff has done a very careful and creditable piece of work, but it betrays at more than one point the inexperience of an amateur. A few such points are the following: round numbers are better used for approximations (p. 4); 1811 should read 1911 (p. 35); it seems unlikely that a sinking fund was used to "carry on public works" (p. 51); a curious use is made of quotation marks (p. 95 and elsewhere); "to" should read "with" (p. 98). There is no index; no chapter headings are given in the table of contents, though they occur in the text; the chapters are of very unequal length, ranging from 12 to 74 pages. From an antiquarian standpoint the book is admirable; but it lacks the firm grasp of a trained economist or historian. So much is promised in the title and subtitle, that the failure to live up to that promise is the more noticeable; although, as a second volume is evidently contemplated, possibly other economic phases of the transportation question may there be given. As a pioneer and careful piece of work in an unworked and difficult field, however, the study deserves commendation, and it is to be hoped that Miss Verhoeff will continue her researches. As a specimen of the printer's art the volume is highly creditable to the Filson Club, of whose publications it forms one of the best numbers.

E. L. BOGART.

*University of Illinois.*

*Alexander Hamilton.* By WILLIAM S. CULBERTSON. John A. Porter Prize Essay, 1910. (New Haven: Yale University Press. 1911. Pp. xiii, 153. \$1.00.)

Nationalism is the key-note of this essay which seeks to show how every measure of the man tended to construct a nation. This is a truism, but the treatment of the subject has led the author into a new and somewhat neglected field of investigation—the Hamilton manuscripts. So intent were the editors of Hamilton's writings to lay stress on political features of his career that the

economic side was slighted, and it was enough to give the texts of his state papers. Dr. Culbertson compares the various forms of the well-known report on manufactures, and measures the influence of Adam Smith. He makes use of the material gathered by Hamilton when preparing his report, material giving interesting information on the condition and prospects of various industries in the different states. More could have been made of Hamilton's own venture into a manufacturing concern, unsuccessful as it proved in the issue. The limits of Hamilton's protective policy are defined, and they rest upon his nationalism. The "harmony of interests," so much pleaded by Carey and his followers, owed much to Hamilton, for he regarded antagonisms of interest within the nation as superficial and due to the inability of people to comprehend their welfare as a whole (p. 135). His home-market argument rested upon his plan of national independence, and politically it is above criticism. The financial measures and foreign policy of Hamilton do not offer the same opportunity for original research, but throughout the volume the author shows a breadth and candor that is refreshing; Loria, Rabbeno, List, and Sumner are quoted, and without bias. The essay is an attempt to apply Hamilton's policies to current social questions, and dogmatic assertions are not infrequent, such as: "Hamilton was in no way the prophet and champion of the capitalistic class; he was the prophet and champion of American Union." The study requires correction from the writings of such critics as Adams and Jefferson.

WORTHINGTON C. FORD.

*American Colonial Government, 1696-1765. A Study of the British Board of Trade in its Relation to the American Colonies, Political, Industrial, Administrative.* By OLIVER MERTON DICKERSON. (Cleveland: The Arthur H. Clark Company. 1912. Pp. 390. \$4.00.)

Dr. Dickerson has written a book of first importance for the study of American colonial history. It concerns an organ of the British system of colonial control that was fundamentally concerned with the welfare and development of the colonies, and was in its widest aspect in immediate charge of all matters of trade and commerce with which the British empire had to deal. Yet, despite its importance, no writer has hitherto attempted to investigate its work or to determine the measure of its influence. As far as any

accurate understanding of its place in colonial history is concerned, the Board of Trade has been persistently ignored by English and American historians, yet to understand American colonial history without it is equivalent to a certain proverbial attitude toward the play of Hamlet.

Dr. Dickerson has divided his work into six sections. The first treats of the organization and personnel of the board, dealing with the establishment of the plantation office, the members of the board, their political position and terms of service, and the periods of varying activity. The second discusses the relation of the board to other departments, the Privy Council and its committee, the Secretary of State, the Admiralty, and the Treasury, the Bishop of London, and Parliament. The third takes up the difficulties of colonial administration, considering first the postal service, and second the opposition in the colonies, due to the aggressive policy of the colonial assemblies and the weakness of the governor's position. The fourth outlines the imperialistic policy of the board, as seen in the plans for a colonial civil list, the control of the judiciary, the reduction of all the colonies to the royal type, and their union for military purposes. The fifth treats of colonial legislation, the royal power of disallowance, and the right of complaint and of appeal from the colonial courts. The sixth, and last, covers a group of subjects falling outside the other sections, such as boundaries, trade, defense, and Indian affairs.

All these aspects of the Board of Trade's activity the author handles with skill and scholarly acumen. His search among the British records has been extensive, though not complete, and the information that he has acquired is sufficient for a treatment that may be considered in a sense preliminary and not final. There is still much to be done upon every question that Dr. Dickerson raises, but for a first work upon the general subject he has produced a book that is remarkably well done. No student can ignore it, and we can but hope that it will stimulate others to enter the same field. During the next few years we are likely to see many works, like this and the recently published volume by Dr. Root on the relations of Pennsylvania with the British government, treating of British control and administration, if for no other reason than that historical science, like nature, abhors a vacuum. Probably many of these works will overstress the importance of the British side and neglect the colonial, which is also inevitable, for the

new view is suggestive and alluring. Probably, also, the results will be embodied in papers and monographs, of the variety disliked by the reading public, because hard to read and harder still to understand. But in time the balance will be restored, the relation of things British and things American will be adjusted, and out of the coördinating process a truer colonial history will be born.

CHARLES M. ANDREWS.

*Yale University.*

*New Zealand.* By ROBERT STOUT and J. LOGAN STOUT. (Cambridge: The University Press. 1911. Pp. 185.)

Students of political and economic conditions in New Zealand should welcome this little book, for it gives an excellent summary of the history of the country and an immense amount of information about its physical features, the people, the chief products, the government and laws, the education system, and the experiments in social legislation that have made the Dominion famous. No man is better fitted to write such a book than Sir Robert Stout, the "Grand Old Man" of New Zealand, who has been intimately connected with public affairs for many years, was twice Prime Minister, has been Chief Justice since the year 1899, and has held many other important offices. In this work he has been ably assisted by his son, J. Logan Stout.

From the point of view of an outsider it seems a pity that the authors have confined themselves almost wholly to description, and have not ventured to give an estimate of the results of New Zealand legislation. It is evident, however, that the hopes of Mr. Reeves, Mr. Tregear, and other ardent reformers have not been fully realized, and that the working people of New Zealand are little, if any, better off than one would expect them to be in a country of such great resources with a population relatively so small. This is the general impression that one receives in reading the book, and it is confirmed by the following passage:—

"The great organization of the State is being used to give an equal chance to all. The New Zealanders may fail, and their experiments may show that the ever-present danger of a true democracy lies in the deadening of individual energy and enterprise by the growth of an all-embracing State interference. But if they fail, their strivings will not have been in vain, though humanity be the poorer for their failure. For the present, they feel that State control is better than to be the slaves of monopolizing companies or autocratic millionaires, or to be strangled in the grip of all-powerful trusts."

The success of social legislation in New Zealand has been very moderate, but, on the other hand, it does not seem to have checked the material progress of the country, as may be seen from the fact that the value of the combined exports and imports for the year 1910 reached the enormous sum of £39,000,000, exceeding by £2,000,000 the record mark of 1907. This is a great volume of foreign trade for a country with scarcely 1,000,000 inhabitants, and shows clearly that a rich country can stand a good deal of social legislation without being brought anywhere near the brink of ruin.

J. E. LEROSIGNOL.

*University of Nebraska.*

*L'Etat des Classes Agricoles en France à la Veille de la Révolution.*

By J. LOUTCHISKY. (Paris: Honoré Champion, Editeur. 1911. Pp. 108. 2 fr.)

Since 1894, Professor Loutchisky has been searching the departmental archives covering the period immediately preceding the Revolution—a task in which the archivists in charge have given expert assistance. The object of the research is the investigation of changes in land ownership and systems of land tenure, and the effect of these changes upon the products of the land and the social condition of owners and laborers. The monograph is in the nature of a partial report, which gives interesting information on conditions disclosed by the investigations, as yet unfinished. The work supplements the study of the same author, published in 1897, "Small Properties in France before the Revolution," and similar contributions by De Lisle.

The first of the seven chapters of the work is devoted to a very brief resumé of the relations between peasant and lord in the different countries of Europe, and to a consideration of the difference in ownership of land, together with the personal conditions due to these relations. The unequal distribution of land among peasant owners in different parishes of the same province and in different provinces, the development of peasant ownership during the latter half of the eighteenth century, and the increase of small properties by the division and sale of large estates, are discussed, by means of comparative statistics, in the second chapter. Then Professor Loutchisky shows how the changes in ownership of land affected the corvée as an incident in the personal relation between peasants and lords. In the feudal conditions obtaining when this



institution was established, it was neither unjust nor excessively burdensome. But under the changed condition of ownership and tenure of land, it became all the obnoxious burden that Turgot and contemporary writers pictured it.

At considerable length the author discusses and illustrates statistically the agricultural conditions which confronted the privileged classes, the influence of lack of capital for large and effective agricultural enterprises, the embarrassment which was inseparable from absentee ownership, the various forms and degrees of property rights into which the nobles came by inheritance, and the unsurmountable hindrances to progress in cultivation of lands. In these chapters, the picture of agricultural perplexities is painted clearly and strikingly. A chapter is devoted to a study of farming as conducted by managers of estates and by renters from hereditary owners. The different groups which composed the peasant class of the period, and the predominance of small farmers are traced in the effect they produced on social economic relations and conditions. The closing discussion of the book covers the situation existing when seigneurial rights were increasingly neglected and disregarded; when vast arrearages of all sorts were allowed to accumulate to the distraction of both creditors and debtors; when the inevitable reaction came and the insufficiency of revenue was sought to be repaired by increased rents and the recovery of lands.

The study is of value to the student of social and economic phenomena and to the historian who seeks to get into close touch with casual facts. The narrative is uncolored by any personal interpretation of facts by the writer, and the summary of comparative statistical results is well handled and illuminative.

ROBERT P. SHEPHERD.

#### NEW BOOKS

BAX, E. B. *The last episode of the French Revolution; being a history of Gracchus Babeuf and the conspiracy of the equals.* (Boston: Small, Maynard. Pp. 271. \$1.50.)

CHATTERTON, A. *Industrial evolution in India.* (Madras: The Hindu Office. Pp. 369. 3s.)

CLERGET, P. *Géographie économique. L'exploitation rationnelle du globe.* (Paris: O. Doin & Fils. 1912. Pp. 473, xii. 5 fr.)

To be reviewed.

- CLERGET, P. *La Suisse au XX<sup>e</sup> siècle. Etude économique et sociale.* Second edition, revised and enlarged. (Paris: Colin. 1912. 3.50 fr.)
- DUPONT DE NEMOURS. *De l'exportation et de l'importation des grains, 1764.* Collection des économistes et des réformateurs sociaux de la France. (Paris: Geuthner. 1911. Pp. xlv, 128.)
- JUSTER, J. *Les juifs dans l'empire romain, leur condition, économique, politique et sociale.* Two volumes. (Paris: Geuthner. 1912. 30 fr.)
- KENNARD, H. P. *The Russian year book.* (New York: Macmillan. 1912.)  
Intended for the merchant and investor, it contains accounts of Russian commercial law, the rights of foreigners, and a translation of the Russian customs tariff.
- LLOYD, C. *Henry Demarest Lloyd 1847-1903; a biography.* Introduction by C. E. RUSSELL. Two volumes. (New York: Putnam. 1912. Pp. 18, 308; 9, 390. \$5.00.)
- LORENZ, C. *Tom L. Johnson, Mayor of Cleveland.* (New York: A. S. Barnes Co. 1912. Pp. 203. \$1.00.)
- LOUIS, P. *Le travail dans le monde romain. Histoire universelle du travail.* (Paris: Alcan. 1912. Pp. 416. 5 fr.)
- MAYER, S. *Ein jüdischer Kaufmann, 1831-1911.* (Leipzig: Duncker & Humblot. 1912. 6 m.)  
Obliged because of failing eyesight to give up academic study of economic questions, the writer of these memoirs became a manufacturer and merchant; and thus, through his close contact with public problems, exerted great influence over the commerce and industry of Austria, especially in developing export trade. Born and reared in the Ghetto, he is able to trace from an intimate knowledge the business life of the Jews, its significance, and their relations toward Christians.
- MESSERI, E. *50 Anni di vita economica e finanziaria Italiana.* (Rome: Loescher & Co. 1912. 10 l.)
- MIM, S. L. *The commercial policy of Colbert toward the French West Indies.* (New Haven: Yale University Press. 1912.)
- MUNSTERBERG, O. *Die wirtschaftlichen Verhältnisse des Ostens.* (Berlin: L. Simion. 1912. 2 m.)
- PLATON, G. *Les banquiers dans la législation de Justinien.* Part I. (Paris: Larose et Tenin. 1912. 5 fr.)
- POOLE, R. L. *The exchequer in the twelfth century.* Ford lectures. (London: Oxford University Press. 1912.)
- QUESSETTE, F. *L'administration financière des états de Bretagne de*

- 1689 à 1715. La Bretagne et les pays celtiques, 2<sup>e</sup> serie. (Paris: H. Champion. 1912. 6 fr.)
- RACHEL, H. *Die Handels-, Zoll- und Akzisepolitik Brandenburg-Preussens bis 1713*. (Berlin: P. Parey. 1911. Pp. xix, 922. 23 m.)
- REINACH, T. *L'anarchie monétaire et ses remèdes chez les anciens Grecs*. (Paris: Imprimerie nationale. 1911. Pp. 14.)
- ROBINSON, F. P. *The trade of the East India Company from 1709 to 1813*. (London: Cambridge University Press.)
- ROSE, J. H. and others. *Germany in the 19th century*. (Manchester: Sherratt & Hughes. Pp. 160. 2s. 6d.)
- ROSS, E. A. *Changing America*. (New York: Century Co. 1912. Pp. 236. \$1.20.)  
To be reviewed.
- ROST, H. *Die wirtschaftliche und kulturelle Lage der deutschen Katholiken*. (Cologne: Bachem. 1911. Pp. 219. 5 m.)
- SAINSBURY, E. B. *A calendar of the court minutes etc. of the East India Company, 1644-1649*. Introduction and notes by WILLIAM FOSTER. (Oxford: Clarendon Press. 1912. Pp. xxviii, 424. 12s. 6d.)
- SAINT-LEON, M. *Histoire des corporations de métiers, depuis leurs origines jusqu'à leur suppression en 1791, suivie d'une étude sur l'évolution de l'idée corporative*. (Paris: Alcan. 1912.)
- SANTORO, M. *L'Italia nei suoi progressi economici dal 1860 al 1910, con prefazione dell'avv. ANTONIO MONZILLI*. (Roma: tip. Popolare. 1911. Pp. xxvii, 522. 10 l.)
- SCHACHNER, R. *Australien und Neuseeland: Land, Leute und Wirtschaft*. Aus "Natur und Geisteswelt." (Leipzig: B. G. Teubner. Pp. 120. 1.25 m.)
- SCHNELL, H. *Die wirtschaftliche Entwicklung Deutschlands im 19. Jahrhundert*. Fortschritt-Bibliothek, 9. (Munich: Buchh. Nationalverein. 1912. Pp. 30. 0.30 m.)
- SEGALL. *Die beruflichen und sozialen Verhältnisse der Juden in Deutschland*. (Berlin: M. Schildberger. 1912. 2.40 m.)
- SPEER, R. E. *South American problems*. (New York: Student Volunteer Movement. 1912. Pp. 270, illus. 75c.)
- STECKELMACHER, M. *Randbemerkungen zu Werner Sombart's "Die Juden und das Wirtschaftsleben"*. (Berlin: L. Simion. 1912. Pp. 63. 1.20 m.)  
To be reviewed.
- TAHON, V. *L'organisation sociale des ouvriers du fer au moyen-âge*. (Malines: L. & A. Godenne. 1911. Pp. 33. 2 fr.)

TARIS, E. *La Russie et ses richesses*. (Paris: P. Roger & Cie. 1912.)

WEBSTER, H. *Rest days: a sociological study*. University of Nebraska studies, XI, 1-2. (Lincoln: University of Nebraska. 1911. Pp. 158.)

An exhaustive and scholarly study of holy days, "evil days" and rest days among the primitive peoples. Includes an investigation of the origin of the Hebrew Sabbath.

WOLF, J. *Die Volkswirtschaft der Gegenwart und Zukunft*. (Leipzig: A. Deichert. 1912. Pp. 335. 6.50 m.)

ZIMMERN, A. E. *The Greek commonwealth: politics and economics in fifth-century Athens*. (Oxford: The Clarendon Press. 1911. Pp. 454.)

— *The Baltimore book; a resumé of the commercial, industrial and financial resources, municipal activities and general development of the city of Baltimore*. By WILBUR F. COYLE, city librarian. (Baltimore: Summers Printing Co. 1912. Pp. 130.)

— *China, social and economic conditions*. Annals, Vol. XXXIX. (Philadelphia: Am. Acad. Pol. & Soc. Sci. 1912. Pp. 179-220.)

Includes "Causes of Chinese emigration," by Pyau Ling; "China: geography and resources," by G. B. Roorbach; "American commercial interests in Manchuria," by D. G. Munro.

### Agriculture, Mining, Forestry, and Fisheries

*Principles of Rural Economics*. By THOMAS NIXON CARVER. (Boston: Ginn and Company. 1911. Pp. xviii, 386. \$1.30.)

This book contains six chapters. The first deals with ways of getting a living, especially with farming; here economic and uneconomic methods are contrasted. Uneconomic methods of getting a living "include all those occupations in which one's success depends upon one's power to destroy, to injure, or to deceive"; economic methods are classified as primary industries, secondary industries, and personal services. Farming is, of course, put at the top of the list of primary industries. The second chapter (pp. 29-116) is devoted to an historical sketch of modern agriculture; the third (pp. 117-222) contains an elaborate discussion of the economic characteristics of the factors of production. Especial attention is given to the law of diminishing returns and to methods of economizing land, labor, and capital. The fourth chapter, containing 65 pages, is devoted to management as a factor in agricultural production. It includes a treatment of the economic principle of farm organization and management, of great

interest to the agricultural student. Some of the topics discussed are: ownership and tenancy; cash or share tenancy; salaried managers; what to produce; staple product *vs.* specialties; reasons for diversification; competing and noncompeting crops; large, medium, or small farming; dear *vs.* cheap labor; the kind of power to use, *e. g.*, horses *vs.* oxen; tools; buildings; scientific management; credit; problems of buying and selling. The fifth chapter (pp. 289-333) contains a brief statement of the theory of distribution. The sixth and final chapter is devoted to the social problems of the country.

This volume is marked by that lucidity of style so characteristic of Professor Carver. It will doubtless be widely used as a textbook in courses in agricultural economics, particularly in those institutions where the course is offered not to the specialist in agriculture, but to general students. The viewpoint is primarily social rather than that of the farmer. To quote from the preface, "It emphasizes the public and social aspect of the problem somewhat more, and the business aspect somewhat less, than do most treatises on this subject." The work represents a marked advance over Professor Carver's earlier book, *The Distribution of Wealth*, especially in tempering the results of logic by more careful adjustments of the hypothesis to the conditions which obtain in the world of economic life. Some of the old positions are, apparently, abandoned. The differential theory of profits is accepted.

This readjustment from a system of logical reasoning, based largely upon the assumptions of the classical economists, to a scientific analysis of modern economic forces, leads to some confusion of thought. For example, on page 299 the Ricardian theory of rent is stated in the usual form with the comment, "It is, beyond all question, a true theory, the only question being whether it is so significant as many economists have supposed"; whereas on the next page a paragraph opens with the statement, "One special difficulty with the differential theory of rent, as commonly stated, is that the same piece of land is worth different sums to different men."

It is hard for the reviewer to understand the author's position on the subject of the proportions in which the factors of production should be combined. Carver's method of applying labor and capital to land until the product attributable to the last increment is just enough to cover this additional cost of labor and capital,

(pp. 221-222) which would yield maximum profits per acre, does not seem consistent with the statement (p. 175), "A large product per acre is desirable *only* when it means a large product per man, and never otherwise"; and to the question, "Shall we economize labor or land?" the reply is given, "It cannot be emphasized too much that the object of economizing labor, as stated in preceding pages, is to secure the maximum product per unit of labor and not to secure the maximum product per unit of land" (p. 188). What Professor Carver has in mind may be entirely correct, but the subject is not sufficiently elaborated to make entirely clear what method he would use in determining the proportions in which land, labor, and equipments should be used. Relying on the author's treatment in *Distribution of Wealth*, it may be fair to assume that he means, specifically, that labor and capital should be applied to land in such quantities that the product attributable to the last increment is just enough to pay the cost of that increment at current rates, without any differential profit for the farmer, and without regard to the fact that not all farm undertakings on the same farm are equally profitable.

The reviewer admits that when considering how much labor and capital to associate with a given entrepreneur who wishes to put a given amount of his personal effort into the business, it may be proper to think of succeeding increments of a properly constituted composite unit of land, labor, and equipments being brought under his management until the product attributable to the last increment no longer adds anything to the total profit. This would give maximum profits for the entrepreneur. This relates to the size of the business unit under a given management or to the proportions between managerial activity and the managed factors of production, but does not apply to the problem of the amount of labor and capital to employ upon a given area of land.

In determining the amount of labor and capital which should be applied to a given acre of land, the method of applying labor and capital to land until the product attributable to the last increment is just enough to pay the cost of the labor and capital, is misleading for the simple reason that maximum profits per acre is inconsistent with maximum profits per unit of managerial activity in all cases except that of the marginal entrepreneur who is assumed to make no profit.

To illustrate, take the entrepreneur who, because of his super-

ior ability, is able to make, on the average, a differential profit of ten per cent upon the labor and capital he manages. It is obvious that if he took no account of this profit and applied labor and capital to a given acre of land until the product attributable to the last increment is just enough to pay for the labor and capital, he would not be getting ten per cent profit upon some of the later increments; whereas, if he ceased applying labor and capital to this acre at the point where his profits per unit of labor and capital reached the maximum average per unit for the total investment on that acre, the other labor and capital (which would be required to increase the intensity of culture to the point where the product attributable to the last increment would just pay for the labor and capital) can be used on other land with greater profit than on the given acre. It is necessary, therefore, that the prospective differential profits be added to the cost of the labor and capital in order to make Carver's method accurate, for extra labor and capital per acre in a given line requires extra managerial activity.

Furthermore, the profits on the varied enterprises are different in a given year, and the profits on a given enterprise vary from year to year, due to weather conditions and to market changes. Hence this profit can never be known in advance. Only estimates are available and the average is misleading for any given case. Professor Carver's method of ascertaining the proper degree of intensity of culture is, therefore, unusable even when adjusted to correspond to the fact of differential profit. In *The Distribution of Wealth* Carver did not admit differential profits, hence his theory of the proportions was logically unassailable even if of no use, but in *Rural Economics* differential profits are granted: hence the theory of the proper proportions of the factors requires modification in order to stand the test of logic.

The solution of this problem seems to lie along the line of seeking the most profitable use for the labor and capital at every turn throughout the year. Sometimes this will yield much more, sometimes less than the cost of the labor and capital, but if at all times the opportunity with the maximum net return per unit of expenditure which demands managerial activity is availed of, the total profit will reach the maximum for the year. This principle, when applied to the application of labor and capital to land, will doubtless result in applying sometimes more and



sometimes less, but usually less to a given area than is called for by Professor Carver's rule of applying more and more until the product attributable to the last increment is just enough to pay the cost of the increment of labor and capital. Cost accounting gives the basis for the practical working out of the problem.

In the application of economic principles to agricultural problems, the classical theories are weak at many points and require mending. The long held theory of rent and the current theory of intensity of culture, can be picked to pieces by any good class of students of agriculture. What is needed is a more scientific analysis of facts to form a basis of economics as an applied science. Notwithstanding this needed criticism, this excellent work on rural economics stands without an equal in the English language and is not second to the best French work on the subject, *Economie Rurale*, by Jouzier.

HENRY C. TAYLOR.

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*Report of the Commissioner of Corporations on Water-Power Development in the United States.* (Washington: Government Printing Office. 1912. Pp. 211, 7 charts, 9 maps.)

This significant report consists of a summary (34 pp.) and a detailed report in three parts: Physical conditions and economic aspects of water-power (58 pp.); Concentration of ownership and control (96 pp.); and Water-power and the public (20 pp.). It is concerned with developed "commercial" power—power generated for sale—and presents the most complete and reliable information on the subject now available.

The Bureau of Corporations computed in June, 1911, a total developed water-power of 6,000,000 h. p., representing: "commercial" power, 2,961,549 h. p.; "manufacturing" power, 1,054,578 h. p.; total power developments of less than 1,000 h. p. each, 2,000,000 h. p. This 6,000,000 h. p. represents about one fourth the estimate minimum and one eighth the estimated maximum potential h. p. of the United States.

The Bureau finds a marked geographical concentration of developed water-power. Nearly fifty per cent of the "commercial" power is in five states (Cal., 14; N. Y., 13; Wash., 10; Penn., 6; S. C., 5) and nearly ninety per cent of the "manufacturing" power is in New England and four additional states (N. Y., 30; New England states, 36; Minn. and Wis., 17; S. C., 5).

The most significant findings of the Bureau are concerned with concentration of ownership and control of developed water-power.

"In California the bulk of the power produced in the northern half of the State is controlled by a single interest, and that in the southern half by only two companies. In Montana two companies control 96 per cent of all the developed power of the State; and in Washington a single interest controls the power situation in the Puget Sound region, while another interest, more or less closely affiliated with it, controls the developed power elsewhere in the State. All the developed power in the vicinity of Denver, Colo., and nearly 70 per cent of the total developed power of that state, is controlled by one interest. In South Carolina one corporation owns 75 per cent of the developed commercial power, while in North Carolina 45 per cent of such power, developed and under construction, is controlled by a single interest. One group of interests practically controls 58 per cent of all the commercial power, developed and under construction, in Georgia. In the Lower Peninsula of Michigan a single group owns 73 per cent of all such power. The great development at Niagara Falls on the American side is controlled by only two companies.

"The local concentration of water-power, just described, by no means reveals the full extent of concentration of ownership. A few large interests have acquired such control over water power as to bring about a still greater concentration. . . . This broader field of control has also included all sorts of public-service corporations regardless of whether these involve water power or not.

"Some idea of the extent of such concentration of control is found in the fact that of the total 'commercial' water power of 2,961,549 h. p., developed and under construction, in the United States . . . over 1,800,000 h. p. is controlled to a greater or less extent—but not absolutely in every case—by 10 groups of interests. . . . Seventeen interests or groups of interests control or strongly influence more than 2,000,000 h. p. of commercial water-power, developed and under construction, or more than 70 per cent of all such power in the United States."

These facts, the Bureau observes, present problems of vital importance to the public welfare, and demand a water-power policy involving three fundamental propositions: the best development of the resource; the protection of the consumer; the reservation, for the benefit of the whole public, of its proper share in the advantages inherent in the natural resource itself. The Bureau believes that it is impracticable to regulate the price of water power by itself, and that the main problem of the public interest attaches to the power site.

H. S. PERSON.

*Tuck School, Dartmouth College.*

*Argument of the Honorable Elihu Root on behalf of the United States before the North Atlantic Coast Fisheries Arbitration Tribunal at the Hague, 1910.* Edited by JAMES BROWN SCOTT. (Boston: The World Peace Foundation, 1912. Pp. cli, 523. \$3.50.)

This volume is more comprehensive than its title indicates; the introduction (pp. ix-cli) contains an historical discussion of many aspects of the fisheries case and an analysis of the award; and the appendix (pp. 375-523) contains a map and many important documents, including treaties and unratified treaties, correspondence, statutes, the award with Dr. Drago's dissenting opinion, etc. Mr. Root's argument, which forms the body of the work, acquires peculiar interest as he arranged the arbitration while Secretary of State and later argued the case as chief counsel on the American side. It gives evidence of the most thorough mastery of the history of the subject, and profound knowledge of international law. He seems to have handled analogous foreign cases with greater familiarity than did his predecessors. It is not likely that a more complete statement of the American position will ever be made; the candor of Mr. Root and the material offered in the introduction and appendix make the book much more than a partisan presentation. To the intelligent reader it affords the basis for a satisfactory understanding of the whole controversy.

CARL RUSSELL FISH.

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#### NEW BOOKS

BENNET, H. H. and TAYLOR, W. A. *The agricultural possibilities of the Canal Zone. Part I. Reconnaissance soil survey. Part II. The outlook for agriculture.* (Washington: U. S. Dept. of Agriculture, Rpt. Pp. 49, maps.)

DALE, H. B. *Coal and the London coal trade.* (London: H. B. Dale. 1912. 6d.)

HENNIG, C. L. *Die Erzlagerstätten der vereinigten Staaten von Nordamerika mit Einschluss von Alaska, Cuba, Portorico und den Philipinen nach Geschichte, Form, Inhalt und Entstehung. Auf Grund der Quellen dargestellt.* (Stuttgart: F. Enke. 1911. Pp. xviii, 293, illus., maps. 8 m.)

JACKSON, T. C. *The agricultural holding act, 1908.* (London: Sweet & Maxwell. 1912. 6s.)

KRIEGE, W. *Der Ahrweinbau, seine Geschichte und wirtschaftliche*

- Lage in der Gegenwart. Eine wissenschaftliche Untersuchung.* (Treves: Paulinus-Druckerei. 1911. Pp. x, 190. 1.75 m.)
- LARIBE, M. A. *L'évolution de la France agricole.* (Paris: Bibliothèque du Mouvement Social Contemporain. 1912. 3.50 fr.)
- LEITHE, H. *Dalmatinische Agrarprobleme.* (Vienna: W. Frick. 1912. Pp. 47. 1 m.)
- TURMANN, M. *Les associations agricoles en Belgique.* Second edition, revised and enlarged. (Paris: V. Lecoffre. 1912. 3.50 fr.)
- WILLECKE, C. *Die landwirtschaftliche Arbeitsvermittlung in Deutschland.* (Berlin: P. Parey. 1912. 5 m.)
- WING, J. E. *Sheep farming in America.* Third edition, enlarged. (Chicago: Breeder's Gazette. 1912. Pp. 368. \$1.00.)
- *Country life.* Annals, Vol. XL. (Philadelphia: American Academy of Political and Social Science. 1912. Pp. viii, 288.)
- Contains, among other papers, articles by T. N. Carver on "Economic significance of changes in country population," B. H. Hibbard on "Farm tenancy in the United States," and J. L. Coulter on "Agricultural laborers in the United States."

### Manufacturing Industries

#### NEW BOOKS

- DOOLEY, W. H. *Textiles for commercial, industrial, and domestic arts schools; also adapted to those engaged in wholesale and retail dry goods, wool, cotton, and dressmaker's trades.* Revised edition. (Boston: D. C. Heath. 1912. Pp. xii, 252. \$1.00.)
- HASSINGER, H. *Der oberbadische Tabakbau und seine wirtschaftliche Bedeutung.* (Karlsruhe: G. Braun'scher Verlag. 1912. Pp. 128. 2.80 m.)
- HUNTER, J. A. *Wool from the raw material to the finished product.* Pitman's common commodities of commerce. (London: Pitman. 1912. Pp. viii, 118. 1s. 6d.)
- LEISSE, W. *Wandlungen in der Organisation der Eisenindustrie und des Eisenhandels seit dem Gründungsjahr des Stahlwerksverbandes.* Staats- und sozialwissenschaftliche Forschungen, No. 158. (Leipzig: Duncker & Humblot. 1912. Pp. xii, 208.)
- To be reviewed.
- PAPWORTH, L. W. and ZIMMERN, D. M. *Clothing and textile trades.* Summary table, with preface by SIR ATHELSTANE BAINES. Introduction by B. L. HUTCHINS. (London: Women's Industrial Council. 1912. 2d.)

### Transportation and Communication

- Progress and Prosperity.* By WILLIAM DEHERTBURN WASHINGTON. (New York: The National Educational Publishing Company. 1911. Pp. xxxii, 887. \$4.50.)

This is a curious book. Written by a practical railway man, "actuated by a sense of public spirit," it purports to tell "the story of the development of transportation and its influence on civilization and history." The slight historical survey which opens the book is, however, only an introduction to a defense of existing railway practices. The thesis of the book is simple, "All progress has had its foundation in the law of movement" (p. 8). This is re-iterated again and again by the author: "Man's survival and the advancement of the world seem to depend upon man's power to maintain and extend his intercourse and means of carriage" (p. 15); "the building of roads brings development; the decline of roads accomplishes national stagnation if not decadence" (p. 46). In all the material progress of mankind, from cave dwelling to the present day, transportation has had the largest and most important share, and to its development is attributable most of the advance made.

A few of the forty-four chapters deal with other topics, such as roads, ocean steamships, the post-office, and the express service, but nine tenths of the book is at once a defense and a glorification of rail roads, or the "railed roads," as the author alternately names them. In reading this deification of transportation the reviewer is reminded of a motto he once saw over the sign of a drayman: "If you want to get rich, keep moving."

Not merely are improved means of transportation held responsible for our present advanced civilization, but the railroad, the highest development of them all, performs its service in the loftiest spirit of altruism. Costly as a railroad is, capitalization is much lower than cost; there is no over-capitalization; most of the profits go back into improvements for the benefit of the public; and stockholders receive scarcely any return for their investment. Items of cost, capital, profit, etc. are figured on the basis of a mile of road per day in eight different groups. Upon this basis, to take one among numerous illustrations, it is concluded that "in 1894 the dividends per mile (of the Mississippi Valley group) would have brought only a cigar a day for the stockholders to divide" (p. 228). One wonders, in the author's own words, "where is the inducement?" Figured out on the basis of a single share per day per mile even a comfortable fortune or enormous profits on watered stock can be made to shrink and appear small. Not merely do the stockholders (nothing is said of the bondholders)

receive little on their capital, but foreigners and outsiders are said, in the northwestern states, to pay fifty per cent of the cost of carriage of the farmer's products. The railroads further dispense enormous benefits in the form of wages, increased land values, etc. As public benefactors of the highest order, they should therefore be let alone to continue their efforts without government interference or regulation.

The book is most interestingly illustrated with over 1200 pictures, which, according to the author, "probably constitute the most complete collection in print" of views dealing with the history and methods of transportation. The publishers have spared no effort on their part to give the volume an attractive appearance, which is marred only by the heavily calendered paper used, apparently made necessary by the illustrations.

ERNEST L. BOGART.

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#### NEW BOOKS

ARIAS, H. *The Panama Canal*. (London: P. S. King. 1911. 10s. 6d.)

Quain prize in international law, University of London; an analysis of national and international negotiations; bibliography of state documents.

BACON, E. M. *Manual of navigation laws. An historical summary of the codes of the maritime nations*. (Chicago: A. C. McClurg. 1912. Pp. 81. 50c.)

To be reviewed.

BIXBY, W. H. *River and harbor improvements. Addresses delivered before the National Rivers and Harbors Congress*. (Washington: Gov. Pr. Off. 1912. Pp. 27.)

BRISTOW, J. L. *Advisability of the establishment of a Pacific steamship line by the Isthmian Canal Commission*. (Washington: Gov. Pr. Off. 1912. Pp. 18.)

GARMAIN, P. *Paris port de mer. Réponse aux adversaires*. (Paris: A. Challamel. 1912. Pp. 443.)

KAEGBEIN, A. *Schiffahrt und Schiffbau des In- und Auslandes. Handbuch 1912*. (Hamburg: Verlagsanstalt & Druckerei-Gesellschaft. 1912. Pp. 618.)

LEWIS, D. J. *Postal express as a solution of the parcels post and high cost of living problems; an adequate express service; relief to consumers and shippers by a reduction of charges and extension of service to the country through rural delivery; a study in the economics of the transport of small shipments*. (Washington: Gov. Pr. Off. 1912. Pp. 97.)

- MOULTON, H. G. *Waterways versus railways*. (Boston: Houghton Mifflin. 1912. \$2.00.)
- PRATT, E. A. *The state railway muddle in Australia*. Murray's Questions of the day. (London: Murray. 1912. 2s. 6d.)
- RAPER, C. L. *Railway transportation. A history of its economics and of its relation to the state*. (New York: Putnam's. 1912. Pp. 331. \$1.50.)  
To be reviewed.
- RUSSELL, C. E. *Stories of the great railroads*. (Chicago: C. H. Kerr & Co. 1912. Pp. 332. \$1.00.)  
Reprinted from "Hampton's Magazine."
- SCHENKEL, T. *Die nordösterreichischen Wasserstrassen und die Frage der Kompensation. Vortragsstudien*. (Graz: P. Cieslar. 1912. Pp. 50. 1 m.)
- STROMBECK, J. F. *Freight classification. A study of underlying principles*. Hart Schaffner and Marx prize essays, XII. (Boston: Houghton Mifflin. 1912. Pp. 126. \$1.00.)  
To be reviewed.
- WILLIAMS, R. *The Liverpool docks problem*. (Liverpool: Northern Pub. Co. 1912. Pp. 44.)
- *Dues and port charges on shipping throughout the world*. Three volumes. (London: G. Philip. 60s.)
- *The deep waterway between the Great Lakes and the Gulf of Mexico; development of the deep waterway in relation to conservation*. Lakeside classics. (St. Louis: Lakes-to-the-Gulf Deep Waterway Association; R. R. Donnelly & Sons Co. 1912. Pp. 49, maps, diagrs. Gratis.)
- *Transportation rates. With particular reference to Section IV of the Interstate Commerce Act, popularly known as the "Long and short haul clause."* (New York: A. M. Fisher, P. O. Box 736. 1912. Pp. 16. 50c.)
- *Tarifs et conditions de transport en Belgique avec la nomenclature des droits de douane en Belgique, France, Allemagne, Angleterre, et Hollande, accompagnés de renseignements postaux, télégraphiques et téléphoniques en Belgique*. (Paris: G. Roustan. 1912. Pp. 25, ix. 10 fr.)
- *Encyklopädie des Eisenbahnwesens*. (Vienna: Urban & Schwarzenberg. 1912. Pp. viii, 480, illus., maps. 18.50 m.)

### Trade, Commerce, and Commercial Crises

#### NEW BOOKS

- BECKMANN, F. *Das Einfuhrscheinsystem. Kritische Betrachtung mit besonderer Berücksichtigung der Getreideeinfuhrscheine*. Volks-



- wirtschaftliche Abhandlungen der badischen Hochschulen. New edition. (Karlsruhe. G. Braun. 1911. Pp. 170. 2.20 m.)
- FUZET and DESCHAMPS. *Cours de commerce et de comptabilité*. Two volumes. (Paris: Delagrave.)
- GEORGES-CAHEN and LAURENT, E. *Les indices des crises économiques et les mesures financières propres à atténuer les chômages résultant de ces crises. Rapports présentés au nom de la commission des crises économiques 1908-1911*. (Paris: Ministère du Travail. 1912. Pp. 77.)  
To be reviewed.
- GIRAUD, P. *L'organisation technique du commerce d'exportation*. (Paris: Rivière. 1912. 10 fr.)
- GRUNZEL, J. *Handelspolitik und Ausgleich in Oesterreich-Ungarn*. (Vienna: A. Hölder. 6 m.)
- HEDINGER, W. *Der Getreidehandel in der Provinz Posen*. (Posen: M. Niemierkiewicz. 1911. Pp. x, 188, tables. 4 m.)
- HEELIS, F., editor. *Pitman's theory and practice of commerce; a complete guide to methods and machinery of business*. In two parts. (New York: Pitman. Pp. 320; 251. \$1.25; \$1.00.)
- HORN, G. *The commercial laws of the world*. British edition, Vol. XXI. *Central Europe, France and Monaco*. Translated by M. R. EMANUEL. (London: Sweet & Maxwell. 1912. Pp. 321-73. 42s.)
- JACOBY, E. *Untersuchungen über Absatzorganisation und Preisverhältnisse im deutschen Baumwollwarengrosshandel*. (Berlin: E. Ebering. 1912. Pp. 74. 2 m.)
- JASTROW, J. *Textbücher zu Studien über Wirtschaft und Staat*. Vol. I, *Handelspolitik*. (Berlin: G. Reimer. 1912. Pp. x, 182. 3 m.)
- KOHLER, C. *Centralverband oder Hansabund? Eine wirtschaftspolitische Studie*. (Leipzig: C. L. Hirschfeld. 1912. Pp. 48. 1 m.)
- LAMPP, F. *Die Getreidehandelspolitik in der ehemaligen Grafschaft Mark während des 18. Jahrhundert*. Munsterische Beiträge zur Geschichtsforschung, XXVIII. New series. (Münster: Universitätsbuchh. F. Coppenrath. 1912. Pp. vii, 191, illus. 3.50 m.)
- NICKLISCH, H. *Die Entwicklung der Handelswissenschaften an den Handelshochschulen. Rede, gehalten zur Eröffnung des Wintersemesters 1911-1912*. (Leipzig: Poeschel. 1912. 0.50 m.)
- PANTZER, R. *Zur Frage der Qualitätsverfeinerung oder Entfeinerung unseres Exports*. (Berlin: Puttkammer & Mühlbrecht. 1912. Pp. 315. 6 m.)
- PRATO, G. *L'Espansione commerciale inglese nel primo settecento in una relazione di un inviato Sabauda*. (Turin. 1911. Pp. 29.)
- ROUSSEAU, R. *Des sociétés commerciales françaises et étrangères*.

*Traité théorique et pratique comprenant une étude du régime fiscal des sociétés commerciales.* Fourth edition, revised and enlarged. Two volumes. (Paris: A. Rousseau. 1912. Pp. 700. 25 fr.)

Accounting, Business Methods, Investments,  
and the Exchanges

*Accountancy Problems with Solutions.* By LEO GREENDLINGER.

Legal notes by CHARLES W. GERSTENBERG. (New York: Business Book Bureau. 1911. Pp. 445. \$5.00.)

This treatise is divided into four parts: Practical accounting problems; Theory of accounts, auditing and commercial law; C. P. A. examination papers without solutions to problems; and a Summary of the federal corporation tax law, with appendix.

Part I presents solutions of forty selected problems dealing with partnership, adjustments, making up trading and profit and loss accounts and balance sheets, executor and estate accounting, adjustments of fire insurance accounts, consolidating of corporations and partnerships, making analyses to interpret the conditions of a business, adjustments of brokers' accounts, realizations and liquidations, closing entries, real estate accounting, adjustment of bond accounts, mine accounts, branch house accounts and cost accounts. In the solution of problems the author, in my opinion, is not altogether satisfactory. For instance, in problem No. 3, which involves the adjustment of partners' accounts on dissolution of a firm when a loss had been sustained, the terms of the problem call for "the payment of a 5 per cent commission to two partners, to be paid from the amount due the other two." This condition is dismissed with the statement that "the 5 per cent commission should be eliminated from the partnership accounts; it is a private agreement to be adjusted by the partners inter se." As a matter of fact the problem demands that the partners' accounts should show the amount payable monthly to each one. If one were employed as an accountant to prepare these statements, and the trustee should make the payments to the partners on the basis of the solution presented, the trustee would find himself liable to partners A and B for over \$1200, which sum he could recover from C and D only by adopting the doubtful expedient of appealing to the law in case they refused to reimburse A and B. A better solution would be to charge the partners C and D and credit partners A and B at the close of each transaction whenever cash has been collected.

In problem 5, which relates to the apportionment of reserves and the distribution of capital and earnings, even if we accept the author's plan of making up the income and expenditure account, the problem as solved shows a deduction of \$150,000 from the gross income of a series of years to be set aside as a reserve when only three quarters of the property had been disposed of and which, according to the terms of the problem, required up to that date a reserve of only \$112,500.

The solution of the insurance problem as presented in the book is open to question. In the first place Mr. Greendlinger states that the "Illinois Fire Insurance Company" in the course of the year given has a net deficit of \$25,595.18. In face of this statement he then proceeds to show that the concern can pay a dividend of \$15,934.97, or 7.967 per cent on the capital stock! Even if this were not objected to, the author's method of determining earned and unearned premiums is decidedly faulty, although, to do him justice, in the "Comments" section of the text he gives the reader the usual plan of determining earned and unearned premiums. Why he does not use the generally accepted plan in the text as a basis of determining income is not clear. Neither is it clear why all of the "organization" expenses should be charged against the income for the first year and yet on the other hand no allowance whatever be made for depreciation on furniture and fixtures.

Space will not permit further comments on the details of the solutions presented. The reviewer feels, however, that the value of the book would have been much increased had the author taken more pains to group his problems logically. The problems in practical accounting which form Part I, and the questions in theory of accounts, auditing and commercial law which complete Part II, are not graded according to difficulties of the technique involved in solution, nor are problems involving similar principles grouped together.

To the experienced teacher, Part III is a valuable source of problem material for advanced class work, but it would be still more helpful if the questions were grouped together in a more natural order. The reviewer appreciates the fact that the papers are presented not so much for the teacher's benefit as to give a contrast and comparison of examination papers which can be used by future examiners. For this latter purpose, however, Part III is deficient in that with one exception there are no comments upon

the good and strong points of the questions submitted. This section of the book could have been made more helpful had the author included a brief criticism of each set of questions and then shown how the wording of the problems could be changed, or how different questions could be substituted to strengthen the papers.

Part IV gives a summary of the federal corporation tax law, to which is appended the full text of the law and copies of the forms to be filled out by different kinds of corporations in making returns to the government. In addition is given the opinion of the Supreme Court upon the constitutionality of the tax as rendered by Mr. Justice Day, March 13, 1911.

As a whole the book is an improvement on the author's first volume; and to the advanced student, the teacher, and the practitioner it will repay careful reading.

JOHN C. DUNCAN.

*University of Illinois.*

*Timber Bonds.* By T. S. McGRATH. (Chicago: Craig-Wayne Company. 1911. Pp. 504.)

The student of investments will find little in this book with which he is not already familiar. It is rather a compilation of forms pertaining to timber bonds than a scientific analysis of these securities. The arrangement of the book is unsatisfactory and not well correlated. The discussions are clear and the reasoning sound, as shown for example in the brief comparison of serial and sinking fund bonds, but for the most part the text consists of general and very incomplete statements.

The forms of trust deeds and bond circulars are unquestionably the best in existence today and worthy of the careful study the author suggests, though one would think it the author's mission to interpret these for the reader. On the other hand, any one who is familiar with timber securities must recognize the difficulties the author has encountered with the very incomplete and unreliable data that exists on these securities and the consequent danger of attempting to establish any theories. To the lumberman and bond house handling timber securities, these forms will be of great value.

Chapters one to six (pp. 9-30) are general discussions on Timber Bonds, Floating Debts, Funded Debts, The Underwriter, Review of Business and Audit of Books. Chapter seven (pp. 31-45) is a quotation from a booklet issued by Clark L. Poole &

Co. of Chicago on the Examination of Property. Chapter eight is Contract Form of Delivery. Chapter nine is an introduction to chapter ten, a copy of a Trust Deed, which together with chapter twelve on Bond Circulars and sixteen and seventeen on Technical Terms comprises 434 of the 524 pages of the book. The four remaining chapters (12 pp.) are devoted to the Style of Bonds, Sinking Fund, Fire Risk and Loan Value.

WALTER E. LAGERQUIST.

*Cornell University.*

*Les Obligations Américaines et le Portefeuille Français.* By LIONEL DE MONTESQUIOU. (Paris: Marcel Rivière et Cie. 1912. Pp. 109. 2 fr.)

The author of this little book has not attempted any extended treatise of the American bond market, but has simply written in a careful and concise way the result of his observations during the last ten years. He has thus attempted a short resumé of this subject, particularly of railroad and public utility bonds, for the benefit of his fellow-countrymen and has shown general familiarity with the bond situation in this country.

The first two or three chapters logically deal with the difference in conditions between France and the United States, and the author takes a sympathetic view of conditions surrounding our newer and less developed nation, seeking to draw the French investor, who for many years has confined his investments to such established securities as consols and rentes, away from the narrow point of view. The author explains the comparative susceptibility of American securities to severe changes in fundamental business conditions, and while he may ascribe too much weight to legislation, etc., as contributory to panics, conditions surrounding these changes in our security markets are quite faithfully portrayed.

In chapters 5, 6 and 7 railroad bonds and public utility bonds are discussed in detail, as it is believed that these are the ones (outside of government and municipal bonds) which would appeal more particularly to the French investor. The author distinctly and pointedly shows that public utilities largely constitute a monopoly in the various cities of France, while on this side of the water they are more often subject to competition. By charts and otherwise, the author shows how the earnings of public utility companies are less affected by periods of depression than either

railroads or industrials, but he realizes that there are also discouraging features connected with public utilities. Altogether, this little treatise shows the French investor the advantages of certain bonds, and seeks to remove the national prejudice against absolutely good, safe, and desirable American bonds.

ROGER W. BABSON.

*Auditing and Cost Accounts.* By SEYMOUR WALTON and STEPHEN W. GILMAN. (New York: Alexander Hamilton Institute. 1911. Pp. xx, 512. \$2.50.)

This volume (XI) of the "Modern Business" series is composed of two parts, the first on "Auditing," by Professor Walton, and the second on "Cost Accounts," by Professor Gilman. In Part 1, the subject of auditing has been closely correlated with accounting, in order to bring out the underlying principles that should be observed, and the benefits to be derived from the constructive work of the auditor. Walton stands on safe ground in nearly every case; he carefully points out all possibilities of fraud and deception, and is very particular in each instance to outline the best plan for avoiding such fraud. Wherever there are several alternative methods of treating a special class of items, he shows these alternatives, and gives his reasons for rejecting unsound methods and for adopting the course he suggests. He considers in detail the methods the auditor should adopt in handling the more important and difficult accounts, and treats these with a lucidity that is exemplary. But occasional lapses are noticed from the general high standard of the work. A typographical error has transposed the words "ledger" and "balance" (pp. 53, 11, 17, 18). Even an untrue statement is made, when he says, "The balance sheet, as we have seen, is a statement of the condition of business as shown by the ledger" (p. 119); for such items as wages and interest accrued, due and unpaid, inventory, etc., would not appear on the ledger unless the accounts were being closed, while a balance sheet, in which these would have to be included in order to be correct, is frequently made out without the closing of the books. Further, his treatment of "Patents" account, by adding "the expense of legal fees in defending the patents or in prosecuting any infringers" (p. 77), as an integral part of the value of the patents, seems of doubtful validity; for the value of the patents for manufacturing purposes is not enhanced by the ex-

penses incident to defending them. Such legal fees are more of the nature of commercial or operating expenses than of additions to capital; just as any legal expenses incurred in defending the ownership of factory machinery would not be treated as an increase in value of the machinery, but rather as one of the business expenses. Then, his chapter on "Testifying" (ch. xvii) is composed of two totally distinct subjects; sections 153-157 inclusive are devoted to the auditor as a witness, while the rest of the chapter is devoted to a discussion of system making.

Of Part II we are unable to make as favorable statements. In his first two chapters, Professor Gilman shows clearly the purpose and necessity of cost accounting and its advantages to the manufacturer and to the public, in preventing waste and misdirected energy, and in securing the highest efficiency. In this, and in his analysis of the elements that enter into manufacturing cost, he has done good work. In his discussion of labor and material as the important elements of cost, he goes into great detail and shows the methods employed in making the proper distribution of these to the various works that are being carried on; but he does not seem to be always clear, for the multiplying of details and of the forms of record used in three different establishments, while it may broaden the viewpoint of those who are already familiar with cost accounts, tends to confuse and obscure some features of the subject for others. The work gives evidence of its having been done in undue haste, for it is throughout ill-digested. Typographical errors are numerous; e. g., "for" (p. 266, l. 26) should be "or;" "Chapter V" (p. 363, l. 22) should be "Chapter VII;" "non-produced" (p. 378, l. 5) should be "tons produced," as we see by reference to Figure 49, p. 377; "cinders" (p. 378, l. 20) should be "cylinder" to agree with the column on the previous page. An error in figures is observed in Figure 8 (p. 302, last column), where \$23.25 should be \$20.75, and \$80.00 should be \$77.50. Also, in the table of contents, no mention is made of chapter IX, but the subjects of chapters VIII and IX are put together under chapter VIII. In his chapter on the installation of a cost accounting system (ch. viii), the author has brought together, apparently in haste, a long series of cost account forms in use by the Bridgeport Brass Co., with a running comment upon them; but, unfortunately, the close relation of one form to others has not been elaborated so as to present the system as an organic and inte-



grated whole. In chapter IX, he treats of cost accounts for public service corporations, including steam railroads, gas companies and electric utilities. Under the first of these, his work is largely but a reprint of the classification of the expenses of steam roads as given in the Interstate Commerce Commission's pamphlet upon that subject. The meager discussion of gas and electric companies is, in each case, chiefly confined to an analysis of the cost of the manufactured product and of the expenses of operation and the sources of income; but the accounting forms and principles necessary for such concerns have not been considered. I fail to see that any useful purpose has been served by this final chapter. Dr. Moxey has handled these subjects so well in the tenth volume of this series, that this part of Gilman's work should have been left out. This text contains some good things, but it fails to construct a system of cost accounts from beginning to end, such as is done, for example, by Eddis, Bunnell, or others whom we might mention.

W. T. JACKMAN.

*University of Vermont.*

#### NEW BOOKS

- BRENTANO, L. *Familienfideikomisse und ihre Wirkungen*. Volkswirtschaftliche Zeitfragen, 258. (Berlin: L. Simion. 1911. Pp. 31. 1 m.)
- BROMLEY, G. W. and W. S., compilers. *Owners of real estate, borough of Manhattan, city of New York, arranged alphabetically by streets, also containing a list of owners, alphabetically arranged giving the property owned by each*. (New York: G. W. Bromley & Co. 1912. Pp. 727. \$75.)
- CHEVILLIARD, G. *Le stock exchange. Les usages de la place de Londres et les valeurs de placement*. Third edition. (London: Effingham Wilson. 1911. Pp. ix, 280.)
- DAWSON, S. S. *The accountant's compendium*. Fourth edition, enlarged. (London: Gee & Co. 1912. Pp. 750. 25s.)
- DAY, C. M. *Silk mill costs*. (New York: Ronald Press. 1912. \$2.50.)  
Written by the cost specialist who installed the systems described.
- EASTON, H. T. *Tate's modern cambist*. (London: Effingham Wilson. Pp. 54.)
- GALLOWAY, L. and BUTLER, R. S. *Advertising, selling and credits*. (New York: Alexander Hamilton Institute. 1911. Pp. xxiii, 651. \$2.50.)

Part I ably discusses the psychology, technique, and economical employment of advertising as a means of increasing business; Part

II gives a thorough analysis of the best methods employed today to secure efficiency in buying and selling; Part III shows how important a factor credit is in the conduct of business, and how it may be safe-guarded so as to yield its maximum benefits. The work has been carefully done and business managers will study it with interest and profit.

W. T. J.

GERSTENBERG, C. W. and HUGHES, T. W. *Commercial law*. (New York: Alexander Hamilton Institute. 1911. Pp. xxiv, 507. \$2.50.)

Presents for business men a concise elucidation of the legal principles underlying contracts, bailments, common carriers, insurance, negotiable instruments, agency, partnerships, corporations, and real and personal property. The application of the principles by means of numerous examples adds vital interest to the study; and a grasp of the laws of business as here presented, while it will not enable a man to dispense with a lawyer's services, will give him a clear understanding of business rights, duties and relations. This text merits distinctive commendation.

W. T. J.

HARMON, W. E. *Capital and labor unified; an essay on the application of the instalment system to investments*. Proceedings, II, 1. (New York: Academy of Political Science. 1911. Pp. iii, 52.)

KLOEPPPEL, E. *Die Grundlagen des Markenschutzes. Beiträge zur Reform des Warenzeichengesetzes*. (Berlin-Wilmersdorf: Walter Rothschild. 1911. Pp. iv, 81. 2 m.)

MCGRATH, T. S., editor. *Timber bonds as investment securities*. Supplement to the "Annals of the American Academy of Political and Social Science," May, 1912.

The subjects treated in these papers are timber bond features, timber valuation, questions of law, the accountant's relation to timber bonds, timber bonds as legal investments for savings banks and the timber cruiser. T. S. McGrath's paper on "Timber Bond Features," and E. E. Barthell's on "Questions of Law" cover all the essential subject matter of the other papers, as well as treating it more efficiently.

W. E. L.

MOODY, J. *Moody's analyses of railroad investments*. Third annual number, 1912 (including 1911). (New York: Analyses Pub. Co.; London: F. C. Mathieson & Sons. 1912. Pp. 13, 636. \$12.)

Physical, income, and capital factors are dealt with; there is a record of every railroad bond or stock issue of each system in the country and a record of prices from 1902-1912.

MUNDY, F. W., compiler and editor. *The earning power of railroads, 1912; mileage, capitalization, bonded indebtedness, earnings, operating expenses, cost of maintenance, fixed charges, comparative statistics, investments, dividends, guarantees, etc.* (New York: Moody's Mag., Bk. Dept. 1912. Pp. 526. \$2.50.)

NIBLACK, W. C. *An analysis of the Torrens system of conveying land*,

with references to the Torrens statutes of Australasia, England, Ireland, Canada, and the United States, with an appendix containing the original Torrens act. (Chicago: Callaghan & Co. 1912. Pp. 463. \$4.00.)

NICHOLAS, F. C. *Mining investments and how to judge them.* Third edition, revised. Investor's library. (New York: Moody's Mag. Bk. Dept. 1912. Pp. 6, 7, 185. \$1.00.)

NICHOLSON, J. L. *Factory organisation and costs.* (London: Gee & Co. 1912. 25s.)

PETELLAT, H. *Etudes critiques sur la contre-partie dans les bourses de commerce.* Vol. I. *Les faux marchés à terme sur marchandises et sur valeurs mobilières ou l'escroquerie au contrat direct.* Preface by RENE LAFARGE. (Paris. 1912. 5 fr.)

REIBNITZ, K. F. *Die New Yorker Fondsbörse. Ihre Geschichte, Verfassung und wirtschaftliche Bedeutung.* (Jena: Fischer. 1912. Pp. vi, 126. 4 m.)

ROLLINS, M. *Tables showing the net return from stocks and other irredeemable securities, at prices ranging from 25 to 225, progressing by intervals of  $\frac{1}{8}$  of 1 per cent, and covering dividend rates from 2 to 12 per cent together with accumulated dividend tables.* (Boston: M. Rollins. 1912. Pp. 54. \$1.00.)

ROSENTHAL, C. A. *Amerikanische Bonds (mit Ausnahme der Schuldverschreibungen der Immobiliarkreditinstitute).* (Berlin: J. G. Cotta. 1912. 2.50 m.)

STOCKWELL, H. G. *Net worth and the balance sheet.* (New York: Ronald Press Co. 1912. Pp. 206. \$1.50.)

VOIGT, A. *Das Bar-Depositen-Wesen der Kreditbanken und die Frage einer gesetzlichen Regelung.* (Schweinfurt: E. Stoer. 1911. Pp. 107. 2 m.)

——— *Railroad operating costs; a series of original studies in operating costs of the leading American railroads.* (New York: Suffern & Son. 1911. Pp. 82. \$2.00.)

——— *What to read on business.* (New York: Business Book Bureau. 1912. Pp. 167.)

Part III, "What to read on accounting," is an annotated bibliography of books (in English) on accounting theory and practice and commercial law.

### Capital and Capitalistic Organization

*Valuation of Public Utility Properties.* By HENRY FLOY. (New York: McGraw-Hill Book Company. 1912. Pp. viii, 390. \$5.00.)

This book is one of several now appearing on a subject which

until lately has received no public attention. The abandonment of competition between private companies, and the unwillingness of most American cities, except in the case of waterworks plants, to follow the example of Europe in municipal ownership, has given great impetus to the regulation of rates and services by public bodies. In waterworks, where municipal ownership has won popular approval, the principles governing the valuation for purposes of public purchase had been fought over for some years in the courts; but even there, final conclusions on many vital phases of the subject had not been reached when the subject assumed a suddenly increased importance from the rapidly growing demand for regulation of lighting, transportation, and telephone systems. The problems involved are far larger than those of technical engineering. Ethics, economics, law, and public policy must be invoked. There is no more fascinating field of study than blazing the way for courts, commissions, and public opinion in the regulation and valuation of public utilities. The municipal feature is now uppermost, but national utilities, like the railroad, the telegraph, the express, and the long distance telephone, will be vastly effected by the outcome of the work in the municipal field.

Mr. Floy, who appeared for the Third Avenue Elevated Railroad Company before the Public Service Commission of the First District, New York, has compiled in this book a summary, more or less detailed, of several recent appraisals by himself and others, with a discussion of several of the principles involved and extracts from quite a number of court and commission decisions. While the book possesses merit in these respects, it lacks clearness in many of the points treated. Preliminary expenses prior to construction are not properly separated from the so-called overhead charges, going and franchise values, and other matters of an intangible nature. A tabulation might well be made of the total allowance, if any, for these various subdivisions, with the grand total of the whole, as allowed in the important cases considered. The index could be greatly improved. More serious, however, is the author's failure to appreciate and explain the rapidly growing revolt against a theory, or application of a theory, of duplication, under which most engineers have given the companies all the unearned increment, due not only to the growth in land values and rights of way since they were bought by the companies, but also that due to the cost of cutting through and replacing paving put

down by the taxpayers since the mains and conduits were laid, and other unearned increments in the shape of going value, and such part of the overhead charges as either have cost the company nothing, or were paid for by the consumer in operating expenses, while fair profits were also being earned. The author refers to the excellent, though conservative work of the Wisconsin Railroad Commission as "preëminent," while almost ignoring the Massachusetts Gas and Electric Light Commission, which, throughout its twenty-seven years of steadily growing efficiency, has conceded to the companies less of these unearned increments than has the Wisconsin Railroad Commission.

Mr. Floy's treatment of depreciation is more clever than profound. He would not only have consumers pay to a public utility enough to permit fair profits and such repairs as are required from year to year, but he would also, and properly, have the consumer pay a further amount to cover depreciation through obsolescence and inadequacy, that will only be recovered after the lapse of some years. But having made the consumer pay all this, he would not deduct this depreciation, which had been paid for by the consumer, from the plant value, but would leave the company free to continue to demand dividends on the value of its property when new, while apparently it is to be free to dispose of this maintenance reserve as it pleases. In other words, the company may collect a fund for depreciation, but in the valuing of a plant for purposes of rate regulation or sale, it may ignore, as "theoretical," any depreciation from obsolescence or inadequacy, if it cannot be clearly observed, even though the consumer has contributed the fund, on the claim of its necessity. Evidently, if companies are to be allowed to collect from consumers a depreciation fund, it must be admitted either that the depreciation to warrant such a change is actually occurring, or that it is a reserve belonging to the consumer.

While the work bears evidence of having been produced by a company advocate, and of being a hasty compilation, it nevertheless brings together in convenient form many things of importance to all interested in the subjects treated, and will serve as a basis for valuable discussion.

E. W. BEMIS.

*Chicago, Illinois.*

*Control of the Market: A Legal Solution of the Trust Problem.*

By BRUCE WYMAN. (New York: Moffat, Yard and Company. 1911. Pp. vii, 282. \$1.50.)

*Corporations and the State.* By THEODORE E. BURTON. (New York: D. Appleton and Company. 1911. Pp. xvi, 249. \$1.25.)

Professor Wyman's book should rank easily as the most important recent contribution to the discussion of the trust problem. If only for its careful and authoritative statement of the established safeguards which the law has thrown around the institution of free competition it would be welcomed. But even more valuable is its subtle and suggestive analysis of tendencies and possibilities in the future development of the law of the market.

The legal justification of the preservation of free competition is, as Professor Wyman clearly shows, merely the fact that free competition is generally accepted as socially desirable. So far as the law now recognizes a *prima facie* right in the matter, it is not the right to compete, but the right of a business man to pursue his calling without hindrance or disturbance. "Fair competition," despite its disturbance of acquired custom and trade relations, is permitted as a matter of public policy, but "unfair competition" finds no such ground of tolerance. Competition essentially malicious in intent, or based upon fraud or intimidation, or upon false or libelous statements, will not, for example, be permitted. But most important in relation to present problems is the fact that forms of competition which are permissible when used by individual firms may be illegal when used by combinations. Price discriminations, factors' agreements, refusals to deal with wholesalers who sell to competitors, and similar methods are permitted the individual trader, but such practices give to combinations an undesirable amount of power and facilitate monopolization. As in the law of conspiracy, it is not true that what one man may legally do any number of men banded together can do with equal legality. It is a matter where delicate discriminations as to the economic effects of particular practices, rather than sweeping rules of logic, must govern.

It is unfortunate that in his discussion of labor combinations Professor Wyman seems to bind himself by rules of logical consistency as rigid as those which he discountenances. Surely, if it is all a matter of public policy, it should be as easy to discrimin-

ate between what different kinds of combinations may do as between what a combination and what an individual may do. If competition has no *prima facie* case in court, why should efforts to eliminate wage competition (as by the closed shop) be pronounced necessarily and inherently illegal? Professor Wyman's conclusions here seem to rest on his statement that "The public wants the best services that can be gotten at the lowest wages which will be accepted." This seems an amazingly weak foundation on which to build a structure of "public policy."

The common law, then, Professor Wyman concludes, is adequate to the task of preventing the growth of monopoly power, except where the monopoly rests upon some secure basis of natural advantage. In this latter case the only possibility is regulation through positive law, and to this end Professor Wyman urges an extension of the law of public callings so as to cover all "virtual monopolies." The possibility of such an extension seems to be more or less bound up with the validity of Professor Wyman's well-known thesis that the law of public callings had its genesis in the necessity of regulating virtual monopolies. His argument for this view is fairly convincing, although he does not take into the account Professor Freund's competing interpretation of the same facts in the early history of the law of public callings. But the author's brief for regulation will probably meet with the approval of most economists, as will his statement that "these occasional decisions, in recent years, by which the dissolution of some one great corporation is attempted in turn, are as futile as the anarchist's bomb," although this seems hardly consistent with his explicit approval of the Sherman anti-trust law as at present interpreted and administered. In other places, too, the book seems to be not altogether consistent. Nor do all the cases cited seem appropriate to the rubrics under which they are placed. But despite these indications of hasty putting together, the book is in general most cogently reasoned. No student of the problems with which it deals can afford to neglect it.

Six lectures delivered at the University of Pennsylvania and an additional chapter on the Standard Oil and American Tobacco Company cases make up Senator Burton's book. It is an elementary, judicial, and readable account of present-day corporation problems. The first chapter, on the "Origins of private



corporations" is the weakest in the book and is not altogether accurate. If Roman analogues to the modern business corporation must be discussed in a popular treatise, they can be found better in the *societates publicanorum* than in the *collegia*. The description of the development of the corporation in mediaeval and modern times is written without knowledge of the lines of descent which modern scholarship has pointed out.

Nor are the other chapters free from errors of fact. It is not true that the only power of the federal government over interstate commerce is derived from the commerce clause of the constitution (p. 63); that corporations having federal charters would be responsible to the rules and regulations of but one authority (p. 67); that a central bank could arbitrarily "control" the rate of interest without reference to the supply of loanable funds in different parts of the country (p. 90); that interest on deposits is the cause of the call loan system (p. 93); that corporations own between three fifths and two thirds of the total wealth of the United States (p. 99); that a corporation, if not a holding company, could in all cases legally buy the properties of competing companies (p. 112); that (under present constitutional interpretations) the profits of all kinds of corporations could be limited by law (p. 145). But the discussions of the nature of combinations in the United States and in Europe, the defects of our corporation laws, the holding company, the recent decisions under the Sherman law, and related topics, are marked in general by a rare degree of insight and discrimination. There is no book of similar compass which furnishes the general reader a better account of the problems relating to the control of corporations and combinations.

ALLYN A. YOUNG.

*Washington University.*

*Private Corporations.* By HORACE LAFAYETTE WILGUS. (Chicago: The La Salle Extension University. 1911. Pp. 194.)

Under this title are reprinted from volume eight of a series on *American Law and Procedure*, chapters on the general nature, the creation, the body corporate, and the dissolution of the corporation. The point of view is legal; the conclusions are supplemented by citations to important cases and reference to historical origins. It is interesting to note that Mr. Wilgus includes con-

siderable matter relating to agreements, pools, and trusts as originally organized by the Standard Oil interests. While this feature may be justified from the standpoint of economic development, it can hardly be defended from the standpoint of corporation law, and, since the book is in other parts so predominantly legal in its atmosphere, the inclusion of sections upon non-corporate forms of organization mars the general symmetry of the work. There are also certain minor defects arising out of the fact that the book is chiefly based upon judicial decisions, such as the statement (p. 157) that the capital stock is the amount which the corporation obtains and is authorized to obtain by way of subscription. That this is the legal view is of course obvious, as illustrated by the paragraph in the Illinois Corporation Act of 1872, which provides that the directors shall be liable for dividends paid out of the capital stock. In general, however, the book, like all of Professor Wilgus' contributions, is written in an interesting manner, arranged according to a logical plan, and will be found generally useful to those who wish a brief treatise on the legal aspect of private corporations.

MAURICE H. ROBINSON.

*University of Illinois.*

*Monopoly and Competition.* By HERMANN LEVY. (London: The Macmillan Company. 1911. Pp. xviii, 333. \$3.25.)

This book, which is a translation from the German original entitled *Monopole, Kartelle und Trusts* (Jena, 1909), is a noteworthy study of monopolistic combinations. As the writer states in his preface to the English translation, he "attempts to explain the existing organization of English industry by a study of the history of monopoly and competition, and at the same time to give an analysis of English cartels and trusts as they now are."

The book is divided into three parts, the first of which deals with "monopoly in the days of early industrial capitalism." This part gives some account of the early monopolies established by patents from the Crown. The claim sometimes made in their behalf that they promoted industry is said to have little foundation, although they developed capitalistic methods of industry at an earlier date than would otherwise have occurred.

The second part of the book deals with "free trade and the earliest monopolistic combinations," i. e., those which arose subse-

quent to the development of the doctrine of free trade. Professor Levy points out that the classical political economists were impressed with a belief in the necessary character of the competitive system, although remarkable contemporary illustrations of monopolistic organization existed. The most important of these was the "Limitation of Vends" for Newcastle coal, which was investigated and reported on by several parliamentary committees. Its relation to earlier coal combinations and the cause of its decay—the cheapening of transportation and the competition of other coal fields previously less accessible to the London market—are described in considerable detail.

The third part deals with "the modern organisation of English industry on a monopolist basis." The principal facts regarding combinations discussed in this part have already been made familiar by Mr. Macrosty's well-known treatise, but the purpose of Professor Levy's study is rather to analyze the causes, and to classify the results than to describe the existing combinations. In thus attempting to give answers to the main problems of scientific inquiry, he has done work of a suggestive and valuable character. It is not possible to give his conclusions in regard to particular combinations, but his general views on the subject may be gathered from the following excerpt:

"The development of cartels and trusts in English industries is restricted within narrow limits by three facts, the absence of a protective tariff, the comparative insignificance of freights, and the rarity of slowly reproduced mineral products likely to form national or international monopolies." He finds also that, even where monopolistic combinations exist in England, the absence of a protective tariff generally makes it impossible for them to obtain extraordinarily high profits.

Professor Levy in his preface expressly invites corrections, and a few points among a considerable number may be made. With reference to the "Limitations of the Vends," his statement (p. 107) that the prohibitions of the law respecting combinations in 1771 "could not touch private agreement" would seem, at least, to call for some further explanation. The assertion (p. 188) that the minette ore is the most valuable in Germany is incorrect, except in the inadmissible sense that the total deposit is the most valuable. In showing that German pig iron prices sometimes fall below English (p. 191), it is not proper to take English hematite

and German basic Bessemer; either basic or acid Bessemer should be taken in each case, and this would probably affect the conclusions reached. The statement (p. 192) that even in bad times the prices of pig iron in America are higher than in England by the greater part of the freight and duty, is somewhat exaggerated, and quite untrue, of course, for Southern foundry at Birmingham, which in bad times runs close to the Middlesbrough quotations.

Grave misunderstanding, at least, is likely to result from the statement (p. 202) that the "American Paper Trust . . . has monopolised the native forests." Reference is made (p. 288) to the "Copper Trust" in America as entirely controlling the home market, which would not be generally accepted as accurate. The assertion (p. 294) that, in the American tobacco trade, it was "partly the high duties on cigars which made a trust so attractive" is apparently incorrect, inasmuch as the American Tobacco Company never had anything approaching a monopoly in that branch of trade, and little prospect of getting it.

It is not to be expected, of course, that great technical accuracy could be attained where so many industries are considered, and minor faults of the character indicated do not imply that this work is not of great interest and positive value.

FRANCIS WALKER.

Washington, D. C.

*Les Syndicats Industriels de Producteurs en France et a l'Etranger.* By PAUL DE ROUSIERS. Second edition. (Paris: Librairie Armand Colin. 1912. Pp. x, 291. 3.50 fr.)

The second edition is substantially similar to the first, which appeared in 1901, except for the addition of a new chapter of some forty-five pages entitled "Les Ententes dans les Transports Maritimes." This chapter is based largely upon the report of the Royal Commission on Shipping Rings, and forms a most valuable addition. Several minor changes and additions may also be noted. For American readers, the principal ones of interest are a brief discussion of the Standard Oil and Tobacco decisions (pp. 27-31), and an added section entitled "La Situation légale des Trusts" (pp. 88-95) in which the "rule of reason" is analyzed. Other new points on American trusts are to be found in a brief consideration of the *Report of the Commissioner of Corporations on the Steel Industry* (pp. 72-78), including a short treatment of

the absorption of the Tennessee Coal, Iron and Railroad Company. In other chapters, changes have been made in the section on the organization of the Comptoire de Longwy (pp. 178-180), and in the discussion of German cartels (pp. 140-141, 145-154). A new section on the Potash cartel or syndicate (pp. 154-160) adds much to the study of the German forms of trust organization.

W. S. STEVENS.

*Wharton School, University of Pennsylvania.*

*Materialien für das wirtschaftswissenschaftliche Studium. I, Kartelle des Bergbaues.* By RICHARD PASSOW. (Leipzig: B. G. Teubner. 1911. Pp. vi, 238. 3.60 m.)

The present work is devoted to mining combinations in Germany, and is the first of a proposed series embodying compilations of original or source material, such as reports, contractual arrangements, statistics and the like, to be used in connection with studies in economics. More than half the volume consists of an illuminating mass of data bearing upon the origin, growth, and organization of the Rhenish Westphalian coal syndicate, which, as the editor states in his preface, is the most important combination in the country, and has to a great extent served as a model for other cartels. As a counterpart to this coal syndicate there is next outlined the arrangement of 1905 which forms the present basis of the coal cartel of Upper Silesia (*Statut der Oberschlesischen Kohlenkonvention*). The remainder of the volume is concerned with the marketing of potash and the organization of the potash syndicate.

The value of such a compilation depends upon the selection of material. As the work is confined to only a few combinations the material devoted to each is sufficient to illustrate its character and general activities. The selection of both combinations and material is well made. The matter devoted to the Rhenish Westphalian coal syndicate, consisting largely of reports of the syndicate itself, gives one an excellent idea not only of the present organization of the cartel and the relations of its members to one another, but also of the conditions leading up to its formation in 1893 and of its history since that date.

The coal combination of Upper Silesia as outlined in the agreement of 1905 is presented in detail. While this combination has not the historical interest that the Rhenish Westphalian coal

syndicate has, it is to be regretted that material concerning the first attempts at organization in the early eighties and their successful consummation in 1890 is not given.

The work is interesting as illustrative of the present tendency toward a more concrete study of economic problems. The presentation of source material in a readily available form fulfills a need which has been felt in the general study of economics and which is being satisfied, as in large measure it has already been, in the study of history and political science.

ABRAHAM BERGLUND.

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#### NEW BOOKS

CHANDLER, A. D. *Express trusts under the common law; a superior and distinct mode of administration, distinguished from partnerships, contrasted with corporations; two papers submitted to the tax commissioner of Massachusetts, under chapter 55 of the Resolves of 1911, requiring a report from him on "Voluntary Associations."* (Boston: Little, Brown & Co. 1912. Pp. 35. \$1.25.)

FAY, C. N. *Big business and government.* (New York: Moffat, Yard & Co. 1912. Pp. vi, 201. \$1.00.)

FOSTER, H. A. *Engineering valuation of public utilities and factories.* (New York: D. Van Nostrand Co. 1912. Pp. xvi, 345. \$3.00.)  
To be reviewed.

GIEBEL, H. A. *Die Finanzierung der Kaliindustrie.* (Karlsruhe: G. Braun. 1912. 3.50 m.)

GOLDSCHMIDT, C. *Ueber die Konzentration im deutschen Kohlenbergbau.* Volkswirtschaftliche Abhandlungen der badischen Hochschulen, 5. New series. (Karlsruhe: G. Braun. 1912. 2.60 m.)

GRAZIANI, A. *Movimento internazionale di capitali e di prodotti.* From the Proceedings of the Reale Accademia dei Lincei. (Rome. 1911. Pp. 14.)

JUDSON, F. N. *The law of interstate commerce and its federal regulation.* Second edition. (Chicago: T. H. Flood & Co. 1912. Pp. xxiv, 805. \$6.50.)

KING, C. L., editor. *The regulation of municipal utilities.* National Municipal League series. (New York: Appleton. 1912. Pp. viii, 404. \$1.50.)

To be reviewed.

MEYER, A. *Die Kapitalanlage.* (Zürich: Art. Institut Orell Füssli. 1912. 2.25 m.)

NEYMARCK, A. *La statistique internationale des valeurs mobilières. Session de la Haye, 1911.* (Paris: Alcan. Pp. vi, 269. 5 fr.)

PHELPS, E. M., compiler. *Selected articles on federal control of interstate corporations.* Debaters' handbook series. (Minneapolis: H. W. Wilson Co. 1911. Pp. 26, 200. \$1.00.)

Contains bibliographies and selected articles for and against the requirement of a federal charter.

RUSSELL, C. E. *The passing show of capitalism.* (Girard, Kan.: The Appeal to Reason. 1912. Pp. 235.)

VAN HISE, C. R. *Concentration and control: a solution of the trust problem in the United States.* (New York: Macmillan. 1912. \$2.00.)

To be reviewed.

WHITTEN, R. *Valuation of public service corporations: legal and economic phases of valuation for rate making and public purchase.* (New York: Banks Law Pub. Co. 1912. Pp. 800. \$5.50.)

WIEWIORSKI, S. *Einfluss der deutschen Bakenkonzentration auf Krisenerscheinungen.* (Berlin: Puttkammer & Mühlbrecht. 1912. Pp. 134. 2.80.)

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*Memorandum prepared from information in the possession of the Labour Department of the British Board of Trade, relating to the text and operation of certain laws in the British dominions and foreign countries affecting strikes and lockouts, with especial reference to public utility services.* (London: Wyman & Sons. 1912. Pp. 162. 1s. 5d.)

### Labor and Labor Organizations

*The Closed Shop in American Trade Unions.* By FRANK T. STOCKTON. Johns Hopkins University Studies in Historical and Political Science. Series XXIX, No. 3. (Baltimore: The Johns Hopkins Press. 1911. Pp. 187. \$1.00.)

Dr. Stockton has written a painstaking study of the history of the closed-shop movement and of its present status in American trade unionism. Much detailed information in regard to this important policy of trade unions is conveniently compiled in his monograph. Very little addition, however, has been made to our information in regard to the theory of the closed-shop policy, the reason for its application, etc. The most important chapters in the monograph are two dealing with the history of the movement and one with the establishment of the closed shop.

The closed shop is not a new weapon in industrial disputes. The English gilds seem to have discriminated against non-mem-



bers. Brentano mentions the fact that some of the gild statutes of the sixteenth and seventeenth centuries provided that "no journeyman was to work with a non-member." Webb declares that in England the closed shop is "coeval with trade unionism itself." The typographical unions in this country almost from the first have opposed "rats." The Journeymen Cordwainers of the City of New York "was probably the first labor organization to adopt a constitution (1805) openly asserting the principle of exclusion and applying it to all non-members." Dr. Stockton discovers three fairly distinct periods in the history of the movement in America. In the first, 1794-1870, the closed shop was maintained by local unions which did not coöperate with each other in regard to the exclusion of the non-unionist. From 1870 to 1901, many national unions made the maintenance of the closed shop a national policy, and locals coöperated with each other. After 1901, the unions faced the bitter opposition of well organized employers' associations.

It is pointed out that the terms "closed shop" and "open shop" have lost their original significance. The closed shop originally meant a shop closed to union men; an open shop was one "opened" to union men. "From 1890 until the present time the older terminology has gradually been superseded by the new." The writer holds with Mr. John Mitchell that the closed-shop policy represents more than a "passing phase" of unionism. But, to the reviewer, the closed-shop policy seems to be essentially one adapted to an era of small-scale industrial organization. Will the industrial type of unionism which is now rising into prominence emphasize the closed-shop policy?

FRANK T. CARLTON.

*Albion College.*

*Making Both Ends Meet: The Income and Outlay of New York Working Girls.* By SUE AINSLIE CLARK and EDITH WYATT. (New York: The Macmillan Company. 1911. Pp. xii, 270. \$1.50.)

Here, in interesting, popular form, are presented the stories collected during an inquiry carried on by the Consumers' League of New York to ascertain the relation between the income and outlay of self-supporting women workers. Since the data were not suitable for tabulation, the writers have wisely refrained from attempt-

ing statistical tables. The book is straightforward, unpretentious and honest. It is avowedly *ex parte*—a statement of the case for the underpaid working-girl, and an argument for the reforms which the Consumers' League has long advocated.

As the title indicates, the book deals with the relation between the earnings and expenditures of women in New York who work for low wages. The purpose of the writers was to present the situation, not of the well-paid, successful working-woman who is able to take care of herself, but of the girl who is at the bottom with little chance of rising and who still needs community protection. The individual struggles of the girls whose stories were most convincing and appealing are recounted in detail. A long, sad procession comes before us, Annas, Katies, Theresas, Natalyas—there are so many of them—sales-girls, shirtwaist and coat makers, milliners, fur sewers, laundry workers, and girls employed in a variety of unskilled occupations. The newly arrived immigrant girl at one extreme, ignorant but competent; the broken widow, American-born, ignorant but incompetent at the other. They are vivid human stories filled with the hopes of the young, the fears of the old, with starved and drudging days, with deprivations and eager longings, with common sacrifices and temptations. The same story, however, is met over and over again—the story of making both ends meet, by eating little when work is in hand, and by eating less when work is scarce; by walking long distances to work in order that precious car fares may be saved; by spending tired nights washing and ironing to save laundry bills. In spite of the struggle, the stories show that often these girls cannot make both ends meet and are trusted and helped by landladies and friends as poor as themselves. When one reads of the generosity, the eagerness of life in the midst of so many hardships, one recalls the old lines, "only the poor are good to the poor and it is left for those who have little, to give those who have less."

The unity of the discussion is disturbed and the book is made somewhat miscellaneous and scrappy, not merely by the fact that the work is the result of a number of different hands, but by the introduction of three not closely related chapters: Chapter III on The Shirt Waist Makers' Strike, Chapter V on the Cloak Makers' Strike and the Preferential Shop, and Chapter VII on Scientific Management as Applied to Women's Work. The chapter on

Laundry Work, perhaps the most interesting in the book, is composed of reports by different special investigators.

EDITH ABBOTT.

*Hull-House, Chicago.*

*The Labor Question.* By WASHINGTON GLADDEN. (Boston: The Pilgrim Press. 1911. Pp. 209. \$.75.)

This little book is a collection of five essays recently published in the "Outlook." It expresses the benevolent or Christian-bourgeois viewpoint in respect to labor organizations and controversies: present social arrangements are at bottom sound; modern industrial development has, however, placed the individual laborer at a disadvantage in bargaining; unions are necessary to redress the balance and keep wages and conditions of employment from degeneration; their essential function, therefore, is collective bargaining; thus functioning, they work toward the completion of democracy—the ideal state wherein good-will, justice and harmony will prevail as the results of a universal balance of power among the social classes. Further, it is argued that this ideal consummation is at present retarded by the feudalistic attitude of employers, which begets class hostility and the current evils of unionism—petty working rules, opposition to prison labor, restriction of output, violence, sympathetic strikes, the secondary boycott, etc. It could be indefinitely forwarded by a frank recognition of the right of the workers to organize and bargain collectively and a friendly attitude toward this action. Let employers adopt this attitude and unionism would become universal, the closed shop controversy would disappear, the demands of the men would be moderate, arbitration would be universalized and harmony attained through honorable, just, and fair dealing.

The book is a doublesided plea for such dealing and a defense of church action in the attempt to secure it. Grant the fundamental social viewpoint of the author and his argument and conclusions are sound. There are those, however, who would seriously question the possibility, under the existing industrial organization, of securing agreement between employers and workers in regard to the fundamental concepts "justice" and "fairness," and thus of attaining a harmonious balance of industrial power. Herein, if anywhere, is the weakness in Dr. Gladden's position.

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## NEW BOOKS

- ANTONELLI, E. *Les actions de travail dans les sociétés anonymes à participation ouvrière.* (Paris: Alcan. Pp. iv, 152. 2.50 fr.)
- BEMAN, L. T., compiler. *Selected articles on the compulsory arbitration of industrial disputes.* Debaters' handbook series. (Minneapolis: H. W. Wilson Co. 1911. Pp. 115, 27. \$1.00.)
- BONG, W. *Christus und die Arbeiterwelt. Meine Erlebnisse als Handwerksbursche und Fabrikarbeiter.* (Vienna: H. Kirsch. 1911. Pp. 200. 2.40 m.)
- BRAUER, T. *Gewerkschaft und Volkswirtschaft. Gedanken und Hinweise.* (Jena: Fischer. 1912. Pp. iv, 104. 2.50 m.)
- BRENTANO, L. *Der Schutz der Arbeitswilligen.* Volkswirtschaftliche Zeitfragen, 265. (Berlin: L. Simion Nf. 1912. Pp. 32. 1 m.)
- BRODA, R. *La fixation légale des salaires. Expérience de l'Angleterre, de l'Australie et du Canada.* (Paris: Giard et Brière. 1912. 2.25 m.)
- BRY, G. *Cours élémentaire de législation industrielle. Lois du travail et de la prévoyance sociale, questions ouvrières.* Fifth edition, revised. (Paris: Larose et Tenin. 1912. 11 fr.)
- BULLOCK, E. D., compiler. *Selected articles on child labor.* Debaters' handbook series. (Minneapolis: H. W. Wilson Co. 1911. Pp. 20, 196. \$1.00.)
- CAPITANT, H. *Cours de législation industrielle.* (Paris: A. Pedone. 1912. 12.50 fr.)
- CHALLAYE, F. *Syndicalisme réformiste et syndicalisme révolutionnaire.* (Paris: Alcan. 1912.)
- DAGUE, J. H. and PHILLIPS, S. J. *Mine accidents and their prevention, for the instruction of mine-workers; especially adapted for the teaching of English to the non-English speaking people.* (Scranton: Delaware, Lackawanna & Western R. R. Co. 1912. Pp. 69, illus.)
- GARDENGHI, G. F. *Legislazione igienica del lavoro.* (Torino: U. t. ed. torinese. 1912.)
- GILDE. *Le syndicalisme professionnel et son évolution nécessaire.* (Paris: Jouve et Cie. 1912. Pp. 134. 1 fr.)
- GOLDMARK, J. *Fatigue and efficiency: a study in industry.* (New York: Charities Publication Committee. 1912. Pp. 890. \$3.50.)  
To be reviewed.
- GOMPERS, S. *Wilson anti-injunction bill (H. R. 11032); labor's reasons for its enactment.* (Washington: Gov. Pr. Off. 1911. Pp. 26.)
- GONNOT, P. *La grève dans l'industrie privée, son histoire, sa légitimité, ses dangers, ses conséquences juridiques, sa réglementation, l'assur-*

- ance contre ses risques. (Paris: A. Rousseau. 1912. Pp. 112. 12.50 fr.)
- GUY-GRAND, G. *La philosophie syndicaliste. La philosophie nationaliste.* (Paris: Bernard Grasset. 1912. 2 fr. each.)
- HEIM, F. and others. *Recherches sur l'hygiène du travail industriel.* (Paris: Dunod et Pinat. 1912. Pp. 174. 6.75 fr.)
- HOMMER, O. *Die Entwicklung und Tätigkeit des deutschen Metallarbeitervverbandes. Ein Beitrag zum Gewerkschaftsproblem.* (Berlin: C. Heymann. 1912. Pp. ix, 175. 4 m.)
- KLARMANN, S. *Die freien Gewerkschaften in Gesetzgebung und Politik. Staats- und sozialwissenschaftliche Forschungen, 162.* (Leipzig: Duncker & Humblot. 1912. Pp. vii, 115. 3 m.)
- LATOUR, F. *Les grèves et leur réglementation.* (Paris: Bulletin de la Semaine. 1912. Pp. 240. 3.50 fr.)
- LEVINE, L. *The labor movement in France; a study in revolutionary syndicalism.* Introduction by F. H. GIDDINGS. Columbia university studies in history, economics and public law, XLVI. (New York: Longmans, Green & Co. 1912. Pp. 212. \$1.50.)  
To be reviewed.
- MORGENSTERN, M., BECK, K. and BERNAYS, M. *Untersuchungen über Auslese und Anpassung (Berufswahl und Berufsschicksal) der Arbeiter in den verschiedenen Zweigen der Grossindustrie. Auslese und Anpassung der Arbeiterschaft in der Lederwaaren- Steinzeug, und Textilindustrie.* (Leipzig: Duncker & Humblot. 1912. Pp. vii, 389. 9.40 m.)
- NEUMANN, A. *Die Bewegung der Löhne der landlichen "freien" Arbeiter vom Ausgang des 18 Jahrhunderts bis 1850.* Vol. xl, Supplement iii, of the *Landwirtschaftliche Jahrbücher.* (Berlin: P. Parey. 1911. Pp. x, 400.)
- OVERLOCK, M. G. *The working people: their health and how to protect it.* Second edition. (New York: "The Survey." Pp. 293. \$1.62.)
- PAWLOWSKI, A. *Les syndicats féminins et les syndicats mixtes en France. Leur organisation. Leur action professionnelle, économique et sociale. Leur avenir.* (Paris: Alcan. Pp. 188. 2.50 fr.)
- PETERSEN, J. C. *The solution of the labor problem; how the workers may organize and take off the market the unemployed; how to get control of the jobs.* (Butte, Mont.: Butte Miner Pub. Co. 1912. Pp. 46. 10c.)
- POHLMANN, A. *Der Staat und die Syndikate. Ein Beitrag zur Bergwerksfrage.* (Leipzig: R. Voigtländer. 1912. Pp. 64. 1 m.)
- ROBINSON, C. C. *The wage-earning boy.* (New York: Association Press. 1912. Pp. 108. 25c.)
- SAVOY, E. *L'apprentissage en Suisse.* (Paris: Larose & Tenin.)

- SERGIO, R. *Sindicalismo e medio evopolitica contemporanea*. (Naples: Soc. ed. Partenopea; Prato: Soc. tip. Pratese, T. Grassi e C. 1911. pp. 141.)
- TALBERT, E. L. *Opportunities in school and industry for children of the stockyards district*. (Chicago: University of Chicago Press. 1911. Pp. 64.)
- THORNTON, W. W. *A treatise on the federal employers' liability and safety appliances acts, with similar state statutes and federal statutes on hours of labor*. Second edition. (Cincinnati: W. H. Anderson Co. 1912. Pp. lxiii, 755. \$6.00.)
- WATELET, E. *Les récents troubles du nord de la France au point de vue historique et économique*. (Paris: Larose & Tenin. 1912.)
- *Fifth annual report of the Central (Unemployed) Body for London, from July 1, 1910 to June 30, 1911*. (London: King. 1912.)
- *Report of the twelfth annual conference of the Labour party*. (London: Office of the Labour Party. 1912. Pp. 118. 3d.)
- *Selected articles on the employment of women*. Debaters' handbook series. (Minneapolis: H. W. Wilson Co. 1911. Pp. 18, 147. \$1.00.)
- *Annuaire de la législation du travail, 14<sup>e</sup> année, 1910*. (Office du travail de Belgique. Pp. 676. 6 fr.)
- *L'apprentissage industriel. Rapport sur l'apprentissage dans l'industrie de l'horlogerie*. (Paris: Berger-Levrault et Cie. 1911. Pp. xviii, 290. 3 fr.)
- *Statistique générale de la France: salaires et coût de l'existence à diverses époques, jusqu'en 1910*. (Paris: Ministère du Travail et de la Prévoyance Sociale. 1911. Pp. 527.)

### Money, Prices, Credit, and Banking

*Banking Reform*. Edited by J. LAURENCE LAUGHLIN. (Chicago: The National Citizens' League. 1912. Pp. xii, 428. \$2.50.)

During the past dozen years the subject of banking reform has been continually challenging the attention of the American public. An undoubted stimulus was given to public discussion of the subject by the panic of 1907; one of whose results was the creation by Congress of the National Monetary Commission, in 1908. In January, 1911, Senator Aldrich, the chairman, submitted the outline of a plan for a "national reserve association" which was understood to embody the general conclusions of the commission's studies. From that time to the present, public discussion of banking reform, centering about the commission's plan, has gone on at a rate unprecedented in our previous history. To further the campaign of public education which must necessarily precede in-

telligent legislation, the National Citizens' League was organized in Chicago in the spring of 1911. The volume now under review is issued by the League, edited by Professor Laughlin, the chairman of its executive committee.

The book contains a very complete analysis and criticism of the whole banking system of the United States. The point of view is clearly that of advocacy of the plan of a National Reserve Association as finally proposed by the National Monetary Commission in its report to Congress in January, 1912. The plan of the book is, first, to show the various defects of our present banking system, at the same time explaining how these defects would be remedied by the adoption of the Monetary Commission's plan of reform. Thus the first dozen chapters (about half of the book) treat of such topics as "present reserve requirements," "commercial paper," "speculation and call loans," "inelasticity of note issue," "the clearing house system," etc.

The remaining chapters follow a somewhat different plan, the idea being to show, one by one, how the various interests concerned would be affected by the adoption of the National Reserve Association. Thus it is demonstrated that the reform would be of great benefit to the small banks, to the state banks and trust companies, to the small merchants, the farmers, the depositors, and the general public. One of the most interesting chapters of the book (ch. 19) describes the present clumsy method of financing the cotton crop of the South and shows what a vast improvement would be made possible by a scientific banking system. The present unsatisfactory relation between the United States Treasury and the banks is described, with an account of the way the National Reserve Association would perform its function of fiscal agent of the Treasury. A chapter on the "international position of the United States" points out our humiliating dependence on foreign financial institutions and makes it clear that until we adopt a scientific banking system the United States will never take the position in international finance which its size and the magnitude of its interests would otherwise warrant. The last chapter is an opinion upon the constitutionality of the National Reserve Association, by Professor James Parker Hall, Dean of the Law School of the University of Chicago. He finds that the plan is constitutional without question.

It goes without saying that this book is not intended primarily



to be a contribution to the knowledge of the expert. Its purpose is clearly to help the average citizen to an intelligent understanding of the problem of banking reform; and, for the accomplishment of this end, is admirably executed. The language is simple and non-technical; the reasoning is remarkably clear. At the same time the treatment is honest and searching and thoroughly scientific. The common errors of popular works, superficiality and a false simplicity which dodges the real difficulties, have been avoided.

The book will hardly escape the charge of being a piece of special pleading. The discussion is uniformly favorable to the plan of the National Monetary Commission. Alleged defects are named, but only to show their fallacy. That the Monetary Commission's plan is perfect would hardly be claimed by any student of banking, and a strictly impartial work would have to consider certain defects. The attitude of the present book, though not strictly impartial, is nevertheless defensible.

This book is the best discussion of the present banking situation that has appeared in a single volume. Its reading will put any thoughtful reader in a position to form an intelligent opinion on banking questions. It is to be hoped that it will have a wide audience and so be able to contribute effectively to the cause of banking reform.

FRED ROGERS FAIRCHILD.

*Yale University.*

*Commercial Paper: A Text Book for Merchants, Bankers and Investors.* By ROGER W. BABSON and RALPH MAY. (Wellesley Hills, Mass.: Babson's Statistical Organization. 1912. Pp. 253. \$2.00.)

The present discussion of the adaptability of the monetary system of the United States to business needs has led the authors of this book to make a study of "the condition, the tendencies and the importance" of commercial paper in our system. Though intended primarily for bank officers and business men, the book is useful for students also.

Of the seven chapters of the book, the first three deal with commercial paper proper; the fourth with the analysis of a financial statement and report; and the last three primarily with banking and bank policy. Chapters two and three, which deal respectively with the form of commercial paper and the selection of commercial

paper, cover about 80 pages of the book and are the most distinctive and useful part of it. From data furnished by the report of the National Monetary Commission, a brief comparative study of the forms of commercial paper and practices in its use in different countries is made and the defects of our own system are pointed out. Rather minute rules are laid down for the guidance of purchasers of commercial paper, and for the protection of investments of this character.

The last part of the book hardly fulfills the expectation raised by the first part. The chapter on banking, comprising about a fifth of the book, is a mere disjointed series of fragmentary sketches of the development of banking and banking institutions at different times and places and adds practically nothing to the value of the work as a study of commercial paper. In the opinion of the authors the first need of reform in our financial system is the creation of a central discount market for commercial paper. Banks often find themselves under the necessity of reselling commercial paper in order to secure the safest and most economical management of their resources. After reviewing the workings of foreign discount systems with approval the authors believe that a satisfactory discount market in this country may best be attained through the creation of a central banking reserve by some organization which shall bind the banks together in their reserve management. As a means of attaining this end they endorse the Aldrich Central Reserve Association scheme of banking reform, but without much consideration of the many vital questions concerning bank policy and management which the introduction of this plan will raise. The last chapter is simply an attempt to apply the method of the Babson Statistical Service in the forecasting of discount rates.

The book is well gotten up and attractive, but lacks an index, which is a serious defect in a practical handbook. The topical table of contents at the end of the book does not take the place of an alphabetical index.

DAVID KINLEY.

*University of Illinois.*

*An Introduction to the Study of Prices.* By WALTER T. LAYTON.  
(New York: The Macmillan Company. 1912. Pp. xi, 155.  
\$.90.)

This little book is written around a "Chart of Average Whole-

sale Prices and World's Gold Production since 1800." The index number is a composite of Sauerbeck's figures for 1860-1910, and Jevons' figures for 1800-1859. The former are shifted from their original basis of 1867-77 to the new basis of prices in the single year 1900. This procedure raises Sauerbeck's figure for 1860 to 132. Jevons' series is then fitted on by making his index of 79 in 1860 equal to 132, and raising his figures for earlier years in the like proportion. Both of these shifts are made by the simple but not rigorously accurate method of division. Mr. Layton is not troubled by the fact that he has joined together an arithmetic and a geometric mean, because he finds that in the years covered by both Jevons and Sauerbeck the two index numbers agree precisely in the direction and approximately in the degree of their fluctuations.

The discussion of this chart presents few points of novelty. Most stress is laid upon the effect of changes in the production of gold upon prices, and the effect of changes in prices upon the economic welfare of wage-earners. Real wages, it is found, "tend to rise more slowly than they otherwise would in times of rising prices, but in times of falling prices they increase more rapidly than if prices had remained unchanged" (p. 103). With this statement is coupled the conclusion that "on the whole the social well-being is best advanced when prices are stationary or slightly declining" (p. 106). Of such remedies for price fluctuations as those suggested by Jevons and Fisher, Mr. Layton hardly knows what to say, except that both are attended by serious difficulties.

That a fellow of Gonville and Caius College, Cambridge, should write a style stiff with academic starch is not unexpected; but that he should be guilty of frequent lapses from good usage is a disagreeable surprise. Phrases like the following are common: "in spite of sometimes very violent fluctuations" (p. 22); "those who had goods to sell but were unable to do so" (p. 29); "while the sequence of purchases described above have been taking place" (p. 35). Such raggedness of detail detracts not a little from the effect of Mr. Layton's exposition.

WESLEY C. MITCHELL.

*University of California.*

*Chile 1851-1910: Sixty Years of Monetary and Financial Questions and of Banking Problems.* By AUGUSTIN ROSS. (Valparaíso: 1910. Pp. 238, iv. \$1.00.)

This is an interesting though somewhat discursive and popular account of the monetary experience of the Republic of Chile since 1850. The author first attempts to compute the production of gold in Chile from the earliest time, although on rather slender data. He describes the situation just before the crisis of 1861 and the excellent measures taken at that time to put Chile on a gold basis. The policy was not carried out, but the country returned to fiat paper, made another attempt at resumption in 1895 and again returned to a depreciated paper money, the use of which still continues, to the great detriment of the country. At present, the country is agitated by the discussion of the evils of its currency and proposed remedies. The account of this experience reads very much like that of our own in the seventies of last century. The book is not a scientific work, but is welcome because it adds to monetary history the experience of still another country with the evils of a bad currency. We may hope that under the leadership of men like Ross, Subercaseaux, Espinoza and others, Chile will soon regain monetary sanity and develop in a way worthy of her great natural inheritance.

DAVID KINLEY.

*University of Illinois.*

*Der landwirtschaftliche Kredit und seine durchgreifende Verbesserung. Eine wirtschaftliche Studie.* By TROSIEN, Regierungsrat, Staatskommissar bei der Börse in Hannover. (Berlin: Verlag von Julius Springer. 1911. Pp. viii, 84. 2.80 m.)

The little pamphlet with this somewhat pretentious title is quite a typical example of German thoroughness and profundity. The problem of cheap agricultural credit, which it discusses exclusively upon the basis of Prussian statistics and Prussian experience, is a problem of considerable magnitude in this country as well, though it is not universally recognized even by economists. In absence of scientific information as to the extent and especially as to the conditions of indebtedness of the American farmer, we often assume quite complacently that "there is plenty of money to be had," and that the farmer has no difficulty in getting it "if he is the right sort of man." Trosien not only discusses the problem but has a definite plan to offer. Whether the plan really amounts to a "radical improvement" even in Prussia is a question which no one who has

not a first-hand knowledge of agricultural conditions in that country would venture to answer. The solution or remedy offered would mean very much less in this country, but the pamphlet is interesting nevertheless for the lucid and concise statement of the theory of agricultural credit, unfortunately couched in the hardest of jaw-breaking German. The reasoning is somewhat as follows:

The growing indebtedness of agricultural land is usually looked upon as an evil symptom. With this point of view the author disagrees. He considers it simply a result of industrialization of agricultural production, for credit grows in agriculture as in other lines of industry, and even more so. The most prominent feature of agricultural development is the increased necessity of circulating capital and also of fixed capital in addition to the value of land. Agriculture needs more machinery, more stock, more fertilizers. It must purchase many raw materials. This additional demand for capital leads to extension of agricultural credit and indebtedness. The increase in that indebtedness in Prussia alone annually amounts to some 500 or 600 million marks. Nevertheless the fears of excessive indebtedness are exaggerated, for even now the total indebtedness represents only a small proportion of the whole capital value of agricultural property—26 per cent of the total value, and 31 per cent of the land value. This means that three fourths of the entire capital invested in agriculture is held by the owners of agricultural enterprises and borrowed capital represents a much smaller proportion of those in commercial and industrial enterprises. On the other hand, credit is much more thoroughly protected in agriculture than in other branches, because of the greater stability of the value of security. Trosien therefore thinks that the term *Verschuldung* (over-indebtedness) should apply only to those cases where the loan exceeds the total amount of capital invested.

It would seem then that the increase in land values, offering better security for mortgage loans, would automatically permit the necessary increase of circulating or operating capital. While a certain tendency in that direction exists, it is not sufficient to meet the demand, because, argues Trosien, the very increase of land values forces an increase of indebtedness, as the proprietor of the agricultural enterprise is unable to leave so much of his property in the form of fixed capital—the value of the land. In other words, the agricultural population is not growing richer in the same

proportion in which farm lands increase in value. This may be the case where the property does not change hands, but as a matter of fact property does change hands at least once in a generation and frequently oftener, by inheritance, sale, etc. In each case the increased value means that a larger amount of fixed capital must be sunk into the ground value. How this must happen in purchase is quite evident. In transmission of property by inheritance, larger sums of money must be paid to some of the heirs by the one who remains on the land. There is no available cash for this, and the obligation increases the indebtedness, reducing rather than increasing the circulating capital. Of course this increased value permits a larger mortgage indebtedness, but that simply puts a higher interest charge upon agriculture without affecting the operating capital.

In addition to these general observations, the author discusses the special conditions in Prussia, such as legal limitations of mortgage indebtedness in relation to the taxable value of land.

Coming to remedial measures, Trosien is convinced that the effort to relieve agriculture by reducing its indebtedness is a mistake. The great necessity is larger credit and cheaper credit. The solution he finds in personal, rather than mortgage, credit, evidently upon the hypothesis that further increase in land values will claim the possibilities of the latter.

The necessity of increasing the circulating capital means personal, short-time credit, parallel to the discounting of notes in the commercial world. He quotes the remarkable development of coöperative agricultural credit in Germany rather as evidence of the growing necessity for it, than as a method offering a satisfactory solution. Sufficient credit can come only from outside. But there Trosien finds a serious obstacle in the German Code, which grants the mortgage indebtedness a preferential claim upon all property of the agricultural enterprise, not limited to the real property but extending even to crops and stock, though purchased after the mortgage has been affected. The remedy, therefore, is simple—to remove these legal obstacles to the development of personal credit, by giving the creditors for supplies a preferential claim upon the product. The entire destruction of the mortgage privilege frightens him as somewhat too revolutionary, and as a first step he suggests the creation of a preferential claim upon crops and thus returns for debts accrued in the purchase of

fertilizers. This alone would present an important measure because the value of fertilizers used in Germany in 1909 amounted to 374 million marks (almost \$100,000,000). The amount of fertilizers used would be increased; the interest charges would be reduced, as personal credit secured by some rights against the property would of necessity be cheaper than it is now unsecured.

Whether this change in the law of mortgages, suggested by Trosien, would materially reduce the cost of all agricultural credit, the reviewer would not venture to decide. It would seem that the reform suggested is rather mild, and that its retroactive force might be an increased difficulty of mortgage credit because of the weakening of its security. But the analysis of the causes for growth of agricultural credit given in this pamphlet is decidedly interesting.

I. M. RUBINOW

*Le Crédit Agricole en France.* By HENRY SAGNIER. Preface by JULES MELINE. (Paris: Librairie Agricole de la Maison Rustique. 1911. Pp. xv, 158. 3 fr.)

The author was a member of the Commission on Agricultural Credit appointed by the International Congress of Agriculture of Paris in 1889 and was subsequently on the extra-parliamentary Commission on Agricultural Credit appointed by the Minister of Agriculture in 1893. His first-hand knowledge of the whole history of French agricultural credit has enabled him to surround the various laws and decrees with important steps and discussions leading up to and establishing the present machinery for rural credit in France. Three things have been especially impressed upon the reviewer's mind in the reading of this book: (1) the extent of the struggle, reaching back more than twenty years, which has been necessary in order to evolve a workable system of decentralized personal credit; (2) the overshadowing amount of state intervention afforded agricultural credit during this period as a result of the demand made upon the Bank of France on the renewal of its charter in 1897; (3) the apparent apathy of many of the regional banks as a result of their clinging to the apron strings of the administration, and the consequent need of renewed local initiative. The author's remedy for this corresponds to the recommendations embodied in the recent *Rapport à la Société nationale d'Agriculture de France*, a copy of which is printed in



the appendix. By offering low rates of interest on both short and long-time deposits, it is held that sufficient working funds could be secured for the local banks in their own neighborhood and that regional banks could gradually dispense with advances from the state by working up a patronage from local banks having a surplus of deposits, as illustrated by the *Caisse de Prévoyance et de Crédit du Syndicat agricole Vauclusien*.

An admirable statement of the foregoing problems is afforded in a *Lettre Préface*, the authorship of which is to be identified with the foremost advocate of legislation for agricultural credit in France.

CARL W. THOMPSON.

*University of Minnesota.*

#### NEW BOOKS

ACHTER, H. *Der Bank- und Postscheckverkehr und dessen Bedeutung für die Volkswirtschaft.* (Münster i. W.: F. Coppenrath. 1911. Pp. 25.)

ASHLEY, W. J. *The rise in prices and the cost of living. An inquiry into its extent and causes.* (London: Evening News Office. 1912.)

BENDIX, L. *Der Aldrich Plan; seine Bedeutung für das amerikanische Bankwesen und den internationalen Geldmarkt.* (New York: Hallgarten & Co. 1912. Pp. 172.)

BICHMANN, H. *Der Zinsfuß seit 1895.* (Berlin: Puttkammer & Mühlbrecht. 1912. 5.20 m.)

To be reviewed.

DENIS, H. *Notice sur les diagrammes relatifs à la hausse des prix et au renchérissement de la vie.* (Belgium: Chambre des Représentants. 1911-1912.)

DUCHENE, A. *Les banques coloniales des Antilles, de la Réunion, de la Guyane. Ce qu'elles sont, ce quelles devraient être.* (Paris: Marchal et Godde. 1912. 1 fr.)

DUFOURMANTELLE, M. *Agricultural credit.* Translated from the French by P. C. Biddle. (Philadelphia: Allen, Lane & Scott. 1912. Pp. 43.)

A summary of several lectures given by the author during March, 1908, at the headquarters of the Union Centrale des Syndicats des Agriculteurs de France. Under Part I, the policy of self-help employed by coöperative credit organizations in Germany, Italy and Hungary is commended in contrast with the extensive state intervention evoked in France. Convenient yet familiar material is presented in Part II, "Uses to which rural credit may be applied" and Part III, "Guiding principles of the organization."

C. W. T.

- GONZALES, V., compiler. *Foreign exchange rates*. Four pages of tables, printed on a heavy board folder, 15 by 8 inches, for quick reference. (New York: Bankers' Pub. Co. 50c. each.)
- HAWKS, T. R. *The debt system alias the banking system and its culmination in the central bank alias the Central Reserve Association*. (Chicago: 1912. Pp. 52. 10c.)
- HINTZE, W. *Das Geldwesen in den deutschen Kolonien*. (Berlin: J. Guttentag. 1.60 m.)
- HOERENZ, F. *Die Preisbewegung landwirtschaftlicher Güter im nördlichen Teil Oberbayerns 1900-1909*. (Parchim: H. Freise. 1912. Pp. iv, 153. 3.60 m.)
- ICARD, G. *Un nouveau régime monétaire*. Preface by B. Nogaro. (Montpellier: Coulet et fils.)
- JOHNSON, G. *Foreign exchange in accounts*. (London: E. Wilson. Pp. 132. 4s.)
- LEBEAU, C. *La banque de France. Ses opérations, son organisation*. (Paris: Blétié. 1911. Pp. 120.)
- LOEWE, J. *Wechsel-, Scheck- und Postscheckverkehr*. (Stuttgart: W. Violet. 1912. 3 m.)
- LOEWENSTEIN, A. *Geschichte des Württembergischen Kreditbankwesens und seiner Beziehungen zu Handel und Industrie*. Archiv für Sozialwissenschaft und Sozialpolitik, V. (Tübingen: J. C. B. Mohr. 1912. Pp. 244. 5 m.)
- MAASS, A. *Das Kassen- und Zahlungsverwesen des Staates im Königreich Belgien*. Münchener Volkswirtschaftliche Studien, 112. (Stuttgart: Cotta. 1911. Pp. viii, 120. 3 m.)
- PORGES, C.; REHMER, W.; SCHACH, E. *Bankenorganisation. I. Organisation einer Grossbank. II. Organisation einer Volksbank. III. Buchhalterische Einrichtungen in einem mittleren Bankbetriebe*. (Leipzig: C. E. Poeschel. 1911. Pp. x, 246.)
- RETZBACH, A. *Die Preisentwicklung seit dem Beginn des neuen Jahrhunderts*. Reprinted from "Soziale Revue." (Munich: Buchh. des Verbandes süddeutscher kathol. Arbeitervereine. 1912. Pp. 29. 0.60 m.)
- VON SCHROETTER, F. F. *Das preussische Münzwesen in 18. Jahrhundert*. No. III, *Die Münzen aus der Zeit der Könige Friedrich Wilhelm II. und Friedrich Wilhelm III. bis zum Jahre 1806*. (Berlin: P. Parcey. 1911. Pp. 28. 4 m.)
- SCHUTZ, A. *Handbuch für den Bankverkehr*. (Vienna: W. Braumüller. 1912. Pp. xii, 593. 10 m.)
- STUNZNER, C. O. *Banken und Wertpapierbörse. Beiträge zur Stellung der Banken auf dem Wertpapiermarkte*. (Altenburg: O. Bonde. 1911. Pp. v, 83. 1.60 m.)

- VOLF, P. *Etude sur les tendances à la souveraineté des syndicats professionnels.* (Paris: Larose et Tenin. 1911.)
- WALTHER, A. *Geldwert in der Geschichte.* (Stuttgart: W. Kohlhammer. 1912. Pp. iii, 52. 1.20 m.)
- WERNIK, L. *Die Depositenkasse, ihre Geschichte und ihr Rechnungs-verhältnis zur Zentralbank.* (Berlin: H. J. Meidinger. 1912. Pp. xii, 193, 65 tables. 7.50 m.)
- WILLIAMS, G. L. *Our new finance; or, from barter to the Aldrich plan; some brief explanations of the media and economics of exchanges, account of lawful money, and banking with reforms under way.* (Atlanta: Foote & Davies Co. 1912. Pp. 45. 50c.)
- WOOD, E. R. *A suggested plan for monetary legislation.* (Philadelphia: Board of Trade. 1912. Pp. 16. 20c.)

### Public Finance, Taxation, and Tariff

*The Judicial Work of the Comptroller of the Treasury: A Study in Administrative Law.* By WILLARD EUGENE HOTCHKISS. Cornell Studies in History and Political Science, Vol. III. (Ithaca, N. Y.: 1911. Pp. xiii, 164. \$1.25.)

This little volume is a significant contribution to American administrative law. After reviewing briefly the development of administrative jurisdiction in our national, state, and local governments, Professor Hotchkiss discusses the almost unique judicial power now exercised by the Comptroller of the Treasury, and points out that the establishment of the Court of Claims and conferring of similar jurisdiction upon circuit and district courts have not prevented the comptroller's jurisdiction from assuming ever increasing importance. The delay and expense of the other remedies leave for many claimants no practical course but an appeal to the comptroller.

The author shows that, while the Treasury Act of 1789 laid the basis for the development of the comptroller's judicial power, that officer's time was until 1894 so far absorbed by detailed administrative work that his decisions were more or less lacking in true judicial quality. The act of 1894, however, relieved the comptroller of routine work sufficiently to enable him to perform properly his judicial function; while it defined his jurisdiction more clearly, and specially emphasized the judicial character of his office. The comptroller is still subordinate nominally to the Secretary of the Treasury; but Professor Hotchkiss points out that this subordination has long been nominal only, and that the

act of 1894, by definitely recognizing the judicial character of his office, probably guarantees the comptroller's independence. This aspect of his subject hardly receives adequate treatment at the author's hands, and it remains for someone to make a more exhaustive study of the growth of the tradition of independent jurisdiction in the comptroller's office.

In conformity with English legal tradition the development of the jurisprudence of the comptroller's office has proceeded by the decision of actual cases. Professor Hotchkiss considers first the cases involving the interpretation of appropriation acts, the part of his subject probably least unfamiliar to most of his readers. Here again it could be wished that he had expanded the treatment of particularly important points; and it would have been desirable also to present, at least for purposes of illustration, a larger number of cases. The footnote citations are sufficient to give confidence in the author's work, but the exposition of principles might well have been amplified.

Cases arising under revenue laws are then considered briefly, as befits their comparative importance; and the author then passes to those involving disbursement of public money, which bring the office the greater part of its work. Few of the matters here discussed are of interest except to those who, fortunately or unfortunately, are obliged to do business with Uncle Sam or upon his account. In treating of claims for certain court fees, Professor Hotchkiss expresses the belief that the "extreme difficulty of applying the law in a way to defeat obviously improper claims, which is so well illustrated in this case, will doubtless lead in time to the mere abandonment of the whole system of compensation by fees" (p. 74). If by this Professor Hotchkiss means that judicial fees should be abolished, his conclusion may well be doubted; but if he merely means that court officials should be compensated wholly by stated salaries, rather than by fees, there will, of course, be no dissent. In the field of disbursements, Professor Hotchkiss concludes, the importance of the comptroller's jurisdiction arises from the magnitude of the total amounts involved: "From the great number of cases and their individually small amounts, it is obvious that but few of these can ever reach the courts. The decisions of the comptroller determine the pecuniary situation of every officer and employee of the government, and to all intents and purposes his decisions in this field are final." A brief chapter

follows, dealing with cases involving the interpretation of contracts, which "call into play judicial activity of a high order." In general the comptroller seems to have leaned toward an equitable rather than a strict interpretation of government contracts.

The last half of the volume undertakes a comparative study of the comptroller's functions and similar functions in French and German administration. While recognizing the difficulty of securing exact parallels, Professor Hotchkiss skillfully compares the methods of financial control in the three countries; and finds that though "nominally an executive officer, the comptroller's judicial powers over treasury administration are far greater than are anywhere possessed by the continental organs of control." He considers it "not improbable" that the system of each country is the best adapted in the conditions under which it operates, and does not find in the development of the comptroller's jurisdiction "a tendency toward the establishment in this country of formal administrative tribunals." In this comparative survey, as in the earlier chapters descriptive of the comptroller's jurisdiction, Professor Hotchkiss gives us something more than a mere statement of the laws, as he finds them. He is interested in the functioning rather than the structure of the political organs which he examines, so that his treatment is vital and in the best sense practical.

The volume, unfortunately, contains an undue number of typographical errors. The second footnote on page 36, the eleventh line on page 68, and the tenth line on page 80 afford some conspicuous cases. The footnote on page 38 gives a curious twist to the title of the legislative, executive, and judicial appropriation bill.

C. J. BULLOCK.

*Harvard University.*

*Moral und Technik bei der Veranlagung der preussischen Einkommensteuer.* By FRANZ MEISEL. (Leipzig: Duncker und Humblot. 1911. Pp. iii, 88. 2 m.)

This interesting and fair-minded discussion of the moral and technical aspects of the Prussian income tax carries with it unusual weight because the author is a public official, qualified by long study and previous publications upon this subject to render an authoritative judgment.

After an examination of the administration of the Prussian income tax, Dr. Meisel concludes that there is a large and not noticeably diminishing amount of evasion, particularly among the agricultural, manufacturing, and financial classes; that the administrative officials are coping actively with the evil but are hindered by the excessive safeguards created by the law for the protection of the personal rights of the taxpayer; that the situation would be improved by conferring upon the administrative machine greater elasticity of procedure and more summary powers of punishment; and that thorough-going reform can be achieved only by the elevation of the moral tone of the taxpaying community. However, in the author's opinion, the most effective means of elevating and maintaining the moral tone is through vigorous punishment, by fines and surtax, of those who understate their incomes. This truth, says Dr. Meisel, could scarcely be exaggerated; and a large part of the monograph is devoted to a criticism of Fuisting, who has so often voiced the opinion that under the Prussian income tax the great need is for further protection of the taxpayer against the fiscal zeal of the bureaucracy.

The Prussian income tax is not, and under existing circumstances cannot be, justly enforced. Despite its moral and fiscal defects, which the author explains so pungently, his faith in the tax stands firm: personal taxation in its most logical form—the income tax—is needed and will persist; its defects can be remedied. It is not a complete success; neither is it a *Lug-und-Trug* system; it is simply unfinished, incomplete. "Die Zukunft liegt in den friedlichen, gesunden Verhältnissen und Beziehungen zwischen Staats—und Privatwirthschaft. Der Friede kann nur einkehren, wenn das gegenseitige Misstrauen schwindet. Dazu brauchen wir eine andere Moral und eine andere Technik."

To the American student interested in finding the scientific and true attitude towards this exceedingly complex question of the income tax, the administrative statistics showing the extent to which tax declarations are corrected and increased, and the judicial statistics revealing the extent to which appeals are taken and fines imposed, are of peculiar interest. It is a pity that administrative and judicial processes in America do not result in a statistical record sufficient to afford the basis of a similarly objective discussion of tax morality in this country.

More interesting still, in Dr. Meisel's monograph, is the evi-

dence of a growing and fruitful German literature dealing systematically and scientifically with the question of tax evasion and its correction. American literature on this subject is almost negligible. A chronic social ailment affecting modern democracy at its most vital point, is allowed to strike its roots deeper and deeper into the political organism, without serious study and without scientific effort at its understanding and correction. The practical statesmen and administrators have done little or nothing with this problem in America. The scholar has a virgin field, which needs scientific cultivation. Dr. Meisel's study supplies an interesting and suggestive invitation to the serious study of similar problems in this country.

T. S. ADAMS.

#### NEW BOOKS

- ACKERMANN, F. *Thüringer Gemeindesteuern, dargelegt an den Verhältnissen im Grossherzogthum Sachsen und in den Herzogthümern Sachsen-Meiningen, Sachsen-Altenburg und Sachsen-Coburg und Gotha*. Abhandlungen des staatswissenschaftlichen Seminars zu Jena, Vol. XI, No. 3. (Jena: Fischer. 1912. Pp. viii, 145. 4.50 m.)
- ANDERSON, W. S. *Smuggling in the American colonies*. (New York: Moffat, Yard & Co. 1912. \$1.50.)
- ASHLEY, P. *Modern tariff history: Germany, United States, France*. New edition, revised. (New York: E. P. Dutton & Co. \$3.)
- VON AUER, H. H. *Das Finanzwesen der Stadt Freiburg i. B. von 1648 bis 1806*. Vol. I, 1648-1700. (Karlsruhe: G. Braun. 1911. Pp. vii, 217. 4.40 m.)
- BEGEMANN, E. *Die Finanzreform-Versuche im deutschen Reiche von 1867 bis zu den Wehrvorlagen 1912*. (Göttingen: Vandenhoeck & Ruprecht. 1912. 3 m.)
- BLOCH, M. *Résultats de la deuxième révision décennale du revenu net des propriétés bâties*. (Paris: Imprimerie Nationale. 1911. Pp. xiii, 203.)
- BOSC, A. *Le service des poudres et salpêtres, 1912*. (Paris: Giard et Brière. 1.50 fr.)
- BRASSEY, EARL. *Sixty years of progress and fiscal policy*. Revised edition. (London: Free Trade Union. 1911. Pp. 125. 1s.)
- BRUNKE, E. G. *Notes on the fiscal controversy*. (London: Free Trade Union. 1912. Pp. 180. 6d.)
- COULON, E. *Tarif pratique des droits de douane*. Fourth edition. (Paris: A. Challamel. 10.50 fr.)



- DALLA VOLTA, R. *Saggi economici e finanziari sull'Inghilterra*. (Palermo: R. Sandron. Pp. 434.)
- DUNRAVEN, EARL OF. *The finances of Ireland before the union and after. An historical study*. (London: John Murray. 1912. Pp. x, 156. 5s.)
- GAERTNER, A. *Der Kampf um den Zollverein zwischen Oesterreich und Preussen von 1849-1853*. Strassburger Beiträge zur neueren Geschichte, Vol. IV, No. 2. (Strassburg: Herder. 1911. Pp. iii, 346. 8 m.)
- GEBAUER, C. *Lehrbuch des preussischen Stempelsteuerrechts. Mit dem Texte der stempelgesetzlichen Vorschriften*. (Breslau: J. U. Kern. 1912. Pp. viii, 354. 7 m.)
- DE GOY, L. *Les subventions de l'Etat et la mesure de leur effet utile au point de vue départemental*. (Paris: G. Roustan.)
- GRASLIN. *Essai sur la richesse et sur l'impôt public*. Collection des économistes et des réformateurs sociaux de la France, Vol. VII. (Paris: P. Geuthner. 1912. Pp. xxx, vi, 215. 8 fr.)
- GREIFF, E. *Reichsstempelgesetz vom 15. Juli 1909 mit sämtlichen Ausführungsbestimmungen für das Reich und für Preussen nebst den Reichsstempel-Nebengesetzen*. (Berlin: F. Vahlen. 1912. Pp. xi, 687. 16 m.)
- HELFRITZ, H. *Die Finanzen der Stadt Greifswald zu Beginn des 19. Jahrhunderts und in der Gegenwart. Mit einer Studie über die Geschichte der Greifswalder Stadtverfassung*. Staats- und sozialwissenschaftliche Forschungen, No. 161. (Leipzig: Duncker & Humblot. 1912. Pp. xii, 297, tables. 8 m.)
- HELLY, H. *Le manuel des impôts*. (Paris: Librairie Dalloz. 1912. 5 fr.)
- HEYMANN, U. *Die deutschen Anleihen*. (Berlin: Puttkammer & Mühlbrecht.)
- KATSCH, M. *Die direkten Staatssteuern in Russland*. (Berlin: E. Ebering. 1912. Pp. 98. 2.50 m.)
- LANDMANN, J. *Zur Entwicklungsgeschichte der Formen und der Organisation des öffentlichen Kredits*. Reprinted from "Finanzarchiv." (Berlin: J. G. Cotta. 1912.)
- LEROY-BEAULIEU, P. *Traité de la science des finances*. Eighth edition, revised. (Paris: Alcan. 1912. 25 fr.)  
To be reviewed.
- LICHTERVELDE, L. *Les méthodes budgétaires d'une démocratie. Etude sur le budget suisse*. (Paris: Giard et Brière. 1912. Pp. viii, 180. 4 fr.)
- MARTINI, P. *Die Einkommensteuerzuschläge in den grösseren preus-*

*sischen Städten in ihrer Entwicklung seit der Miquelschen Steuerreform.* (Berlin: R. Trenkel. 1911. Pp. 94. 2.50 fr.)

McLENDON, S. G. *McLendon on international tariff relations.* (Atlanta, Ga.: Foote & Davies Co. 1912. Pp. 140. \$1.50.)

MENSI, F. F. *Geschichte der direkten Steuern in Steiermark bis zum Regierungsantritt Maria Theresias.* *Forschungen zur Verfassungs- und Verwaltungsgeschichte der Steiermark*, Vol. IX. (Graz: Styria. 1912. Pp. xiv, 403. 5 m.)

MOLL, B. *Untersuchungen zur Geschichte des Objektes direkter Steuern.* (Leipzig: Veit & Co. 1912. Pp. 15. 0.50 m.)

NAPIER, T. B. *The new land taxes and their practical application.* Second edition. (London: Stevens & Sons. 1912. Pp. ciii, 600. 18s.)

NORMAN, A. W. *A digest of the death duties. Vol. II, Legacy duty. Succession duty.* Third edition. (London: Butterworth. 1912. Pp. xliii, 470. 25s.)

PERIN, R. *Das Problem des unverdienten Wertzuwachses und dessen Besteuerung mit besonderer Rücksicht auf Oesterreich.* (Vienna: Manz'sche Univers.-Buchh. 1912. Pp. xii, 151. 4.80 m.)

SHELLE, G. *Le bilan du protectionnisme en France.* (Paris: Alcan. 1912. 2 fr.)

SERVEL, A. *L'organisation administrative et financière de l'Afrique équatoriale française.* (Paris: E. Larose. 1912. 5 fr.)

SUNDARAM, A. *The sterling debt of India.* (Madras. 1912. Pp. vii, 28. 6d.)

TESCHEMACHER, H. *Die Einkommensteuer und die Revolution in Preussen. Eine finanzwissenschaftliche und allgemeingeschichtliche Studie über das preussische Einkommensteuerprojekt von 1847.* (Tübingen: H. Laupp. 1912. Pp. xi, 80. 2.80 m.)

VIGNALI, G. *La riscossione delle imposte dirette in Italia: dottrina, legislazione, giurisprudenza.* Vol. I. (Milan: Soc. ed. libraria tip. Indipendenza. 1911. Pp. 564. 14 l.)

WOLF, J. *Die Steuern in Deutschland. Ein Leitfaden.* (Berlin-Wilmersdorf: W. Rothschild. 1912. Pp. 28. 1 m.)

——— *Speakers' handbook, 1912 edition.* Revised and enlarged. (London: Publication Dept., Tariff Reform League. 1912. 1s.)

——— *State and local taxation. Addresses and proceedings. Fifth annual conference under the auspices of the National Tax Association, held at Richmond, Va., September 5-8, 1911.* (Columbus, O.: National Tax Association. 1912. Pp. 485.)

Contains a summary review of the tax legislation of the year. Special papers present in more detail the developments in taxation in Cali-

ifornia, Iowa, New York, Oregon, Virginia, and Wisconsin. The taxation of public service corporations by the gross earnings method is strongly urged in papers by Mr. Alfred Holcombe and Mr. Allen Foote. Mr. Foote presents also the novel plan of a state tax on local government incomes as a substitute for the state general property tax, while Mr. William Corbin advocates the plan of apportionment of state taxes on the basis of local revenues. Professor Bullock presents the arguments for and against local option in taxation and comes to a conclusion adverse to it. Problems of administration occupy a prominent place. The conference adopted resolutions in favor of central supervision, the separate assessment of land and buildings, and the use of standard units of measurement as a basis of valuation.

E. T. MILLER.

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*Verhandlungen der Generalversammlung in Nürnberg 9 und 10. 10. 1911. I. Fragen der Gemeindebesteuerung mit Berichten von WALT. LOTZ und WALT. BOLDT. II. Probleme der Arbeiterpsychologie unter besondere Rücksichtnahme auf Methode und Ergebnisse der Vereinserhebungen mit einer Bericht von H. HERKNER. Schriften der Vereins für Sozialpolitik, 138. (Munich: Duncker & Humblot. 1912. Pp. v, 215. 5 m.)*

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*Die Tarifverträge im Jahre 1910. Kaiserliches statistisches Amt. (Berlin: Heymann. 1911.)*

### Population and Migration

*The Immigration Problem.* By JEREMIAH W. JENKS and W. JETT LAUCK. (New York: Funk and Wagnalls Company. 1912. Pp. xvi, 496. \$1.75.)

The United States Immigration Commission during 1907-1911 expended nearly a million dollars and collected a great mass of data dealing with various aspects of immigration: and its report, in 42 volumes, is now issuing from the press. Professor Jenks of Cornell was a member of the commission, and Dr. Lauck, formerly of Washington and Lee University, was its industrial expert. Professor Jenks had previously conducted several industrial investigations, and not long ago made a report to the government on oriental immigration to the Pacific coast.

The present volume is an attempt to classify the more important material collected by the commission, and to compress it into a convenient popular handbook. It is obvious that such a desirable undertaking must have marked limitations. In order to sum up all the different lines of investigation and their relations to each other, elaborate discussion of any topic was impossible, and only necessary comments could be given. In view of this fact, it must

be said that the sketch of the commission's work is very complete, nearly every aspect of the immigration question being at least mentioned. Since the report of the Industrial Commission, in 1901, the subject has received much study; and the present volume gives not merely the latest statistics, but some new topics, and the elaboration of many old ones.

The topic most fully treated is that of the immigrant in industry, there being chapters on manufacturing and mining communities, the immigrant in agriculture, the status of immigrants in industries, the floating labor supply, and the immigrant as a dynamic factor in industry. Special attention is given to rates of wages and to housing conditions. Other topics, comparatively new, are immigrant banks, and the agencies of protection, assimilation, and distribution. Lastly, conditions on the Pacific coast and oriental immigration receive the benefit of Professor Jenks' personal investigations and conclusions. The other subjects treated, such as causes of immigration, assimilation, and legislation, follow more closely the lines of previous works. A very influential cause of immigration, namely, the tariff, is not mentioned at all.

The contrast between the "old immigration," which arrived before 1883, and the "new immigration," which has come since, insisted on as most important by previous writers, is given due weight throughout the work. But in the opinion of the authors, whatever immigration problem there may be—and they hold that there is one—is economic and not social or racial. Hence the emphasis on the immigrant in industry, on the displacing of native labor, and on the danger to the standard of living. Very little is said about heredity, and eugenics is not mentioned. To give such exclusive prominence to the economic factors, seems to the writer fundamentally erroneous. It is true that, from the practical and political points of view, economic effects of bad immigration are among the most conspicuous; but the instincts and habits which cause a low standard of living, willingness to underbid native labor, and migratory habits, are matters of race and inheritance. One cannot imagine men of the Baltic race being willing to live as do many of our recent immigrants, no matter how poor they might be. Against this view is the argument that such tendencies are only temporary, and attention is called in one chapter to the investigations of Professor Boas,

tending to show modifications in the skulls of immigrant children. Many biologists dispute Boas' conclusions; and it would still have to be proved that changes in the skull involve changes in character.

The figures for crime (p. 54) and for school children (pp. 283-285) are not worked out with reference to population, only the absolute figures or percentages being given. The authors seem, also, unduly optimistic over the working of the present law. On page 27 they say, "with very rare exceptions every immigrant admitted to this country is now in good health"; and, as to mental defectives (p. 47), "the present law on this point seems to be satisfactory." They also speak, on page 44, of the fines on steamships as having made the transportation of diseased aliens unprofitable. The testimony of the Commissioner of Immigration at New York, and of the New York state officials, is directly contrary on all these points. The fines on the steamships foot up each year to a large amount; and, in a recent case within the writer's knowledge, of 300 aliens certified as defective by the examining surgeons, all but 3 were landed. Hence the reference (p. 326) to "the present rather rigid enforcement of the laws" seems to the writer unfortunate. The authors also fail to give due weight to the objections to distribution of immigrants, in the absence of more restrictive legislation, which were clearly set forth in the last report of the Commissioner-General.

The probability of new legislation may account for the insertion of the text of the pending Dillingham bill instead of that of the present law; and lack of space, for the absence of any bibliography. The statistical appendix contains many useful tables.

PRESCOTT F. HALL.

*The Declining Birth-Rate: Its National and International Significance.* By ARTHUR NEWSHOLME. New Tracts for the Times. (New York: Moffatt, Yard and Company. 1911. Pp. 60. \$.50.)

Within the compass of this slight booklet Dr. Newsholme has dealt successively with three aspects of the problem of the reduced birth-rate. He presents at the outset evidence of the rates of natural increase at different recent periods and in different countries, using for this purpose figures as far as possible cleared of fallacy by his now well-known method of birth-rate correction.

The immediate cause of the declining birth-rate he finds in volitional limitation of the family, by means of checks which at present are not practiced to a uniform extent in the several economic classes of society. But, finally, proceeding from this familiar conclusion to interpret the effects of such differential control, he shows himself exceptionally and agreeably free from panic alarm at the outlook. Restriction of births, he reminds us, has not long been prevalent. Knowledge and acceptance of the restrictive practices will quite likely have spread pretty thoroughly through all social ranks before the present unequal resort to them has twisted the race out of shape. Meantime we may reflect that even for those who are born poor external disadvantages are being overcome, and that an inherent and hereditary inferiority of the working-class population cannot yet be regarded as demonstrated. In spite of all this, the problem is still serious. The hope of solution lies in an enlightened opinion, operating to revise the standards of those who are disinclined to parenthood.

Dr. Newsholme has here added little or nothing to scientific knowledge. It would be easy to find in the literature of population more adequate discussions of practically every topic he has touched upon. But in what he has attempted he has achieved a large measure of success. His book is written for the uninitiated, not for the expert; and to the uninitiated it may be recommended as a sane and useful primer of a subject which ought to be better understood.

JAMES A. FIELD.

*University of Chicago.*

*Die Zukunft der Juden.* By WERNER SOMBART. (Leipzig: Duncker und Humblot. 1912. Pp. 90. 2.50 m.)

The author's researches<sup>1</sup> in the history of the Jews have attracted so much attention that he has felt the need of expressing his views on their future. Sombart believes that the extreme poverty of the Eastern Jews may be alleviated by colonization in and near Palestine, when the growing anti-semitic sentiment in the United States assumes the form of restrictive legislation. For Western Jews he does not favor or believe in the possibility of assimilation, which would deprive the world of one of its most

<sup>1</sup> *Die Juden und das Wirtschaftsleben*, reviewed in *AMERICAN ECONOMIC REVIEW*, March, 1912, p. 81.

brilliant races, and the efforts toward which would emphasize the most objectionable traits of the Jews, a people whose highest qualities are brought out by racial self-realization and solidarity; hence Zionism is useful as a unifying national ideal. The writer defends German discriminations against Jews as a means of self-protection, but his ideal is complete equality of opportunity moderated by the exercise of discretion by the Jews themselves. One can hardly agree with the author that "unheard of hatred of the Jews" is common in the United States, and one's confidence in his conclusions is affected by this and other evidences of the inadequacy of his information about America.

E. A. GOLDENWEISER.

#### NEW BOOKS

BATESON, W. *Biological fact and the structure of society*. The Herbert Spencer lecture, 1912. (Oxford: Clarendon Press. 1912. 1s.)

BEALE, O. C. *Racial decay*. (London: Fifeild. 1912.)

HELBOCK, A. *Die Bevölkerung der Stadt Bregenz am Bodensee vom 14. bis zum Beginn des 18. Jahrhunderts*. Forschungen zur inneren Geschichte Oesterreichs, No. 7. (Innsbruck: Wagner'sche Universitäts-Buchhandlung. 1912. Pp. xiii, 263. 10 m.)

ISEMAN, M. S. *Race suicide*. (New York: Cosmopolitan Press. 1912. Pp. 216. \$1.50.)

To be reviewed.

WHETHAM, W. C. D. and C. D. *An introduction to eugenics*. (Cambridge, Eng.: Bowes & Bowes. 1912. Pp. viii, 66. 1s.)

Mr. and Mrs. Whetham, whose other writings have made them well known among eugenicists, here venture on the difficult task of outlining their subject in such a way as to attract and inform the newcomer. They have chosen to survey the whole field of eugenics rather than to fix attention on a few salient features. The result is inevitably thin; brief exposition and narrative predominate; full discussion of the methods of eugenic study is out of the question. Yet of its kind the little book is excellent.

J. A. FIELD.

— *La mortalità per tubercolosi a Firenze nel quinquennio 1907-11*. (Florence. 1912. Pp. 45.)

#### Social Problems and Reforms

*The Religion Worth Having*. By THOMAS NIXON CARVER. (Boston: Houghton Mifflin Company. 1912. Pp. 140. \$1.00.)

The religion worth having is that which inspires us to the highest continuous economic productivity, and enables our nation to sur-



vive in the struggle for existence. The group is the end, the individual the means only. Production, not consumption, is the end of life—dominion over the earth, not leisure and “culture” the goal. The classic doctrine of economic hedonism (reduced to its lowest terms as the “pig-trough philosophy”) is cast out of the temple, and in its place is set up a hard and fast doctrine of social utilitarianism—a very stoic and very austere “work-bench philosophy.” Far from admitting even for a moment that there can be anything in the idea of art for art’s sake or culture for culture’s sake, the author swings to the other far extreme and posits work for work’s sake as the supreme end of life. Enjoyment is a by-product. Consumption beyond what is necessary for efficiency is gazed at askance, in fact roundly condemned. Competition is glorified as the test of efficiency, and inequality is justified by works. Here is an extremely virile doctrine, an unfaltering following out to their full logical conclusions of the fundamental assumptions, or facts, if they be facts for all time, of struggle and selection. The biologico-economic interpretation of society and ethics, which so evidently guided Professor Carver in the choice of selections in his *Sociology and Social Progress*, is here pushed unhesitatingly into the religious field, and Christ is claimed as the great sponsor of an economic ethics almost Nietzschean in character. Blessed are the meek because they are the scientific and have the only true faith—faith in the stability and workability of God’s laws (the laws of nature), because they are teachable searchers after useful knowledge, and shall therefore logically inherit the earth. The poor are poor largely through their own laziness and dissipation—failure to conserve their resources; and the weak are rightly eliminated through competition, provided it be free and fair. Much fault could be found with these sharp and unlovely conclusions, the more because the author does not always display in his language freedom from an irritated intolerance—perhaps justified, we do not know—of the more easy-going, “liberalistic,” religious idealism of the day, or from an impatient scorn for democracy’s most recent yearnings and strivings, which he regards as a fruitless faith in “voting” and “palaver.” Nevertheless he has put forth a little book that should be a tonic, a healthy galvanic shock, to every reader, because it in effect demands a more rational perspective in social and religious ethics—less attention to the weak, degenerated, and parasitic, more to the poten-

tially efficient and productive. Nor does one have to accept Professor Carver's root notion of an interminable struggle and elimination—à la Benjamin Kidd—to see this essential truth in his book.

The author deserves a vote of thanks, in these days of discursive writing and cheap printing, for the brevity, clearness, and logic of his style. He says what he wants to say and has done with it. We wish, however, that he had not been quite so brief. He leaves unanswered a number of insistently recurring questions. After all, what is the use of obtaining dominion over the earth? Why should one toil and toil if it be only to toil more? If prosperity and wealth are so dangerous to moral virility as he suggests, can he really hope for any religion (especially his own, which is directed always at more wealth) which shall really be strong enough to keep man from degeneration? Perhaps these questions would disappear, did the author sufficiently define what he means by productivity. What is necessary for efficiency? Evidently he leaves a bridge behind him after all, for it would doubtless be argued stoutly by our successful rich that their apparently luxurious expenditure is all "necessary" to keep them in proper frame of mind for efficient work. The author's present view of the problem of population is also left in question. We had thought him a Malthusian, but he shows indications of fearing race suicide much more than overpopulation, and even, like Karl Pearson, of welcoming overpopulation as a spur to conflict and thus to race progress. All this, too, raises the question whether his philosophy is not essentially a male philosophy for a man-made world, rather than a full human philosophy with both men and women in its purview. We are left with a feeling that the author would go with some of the popular eugenists of the day and make woman a mere reproductive organism rather than an integral part of this race, the progress of which is still to entail so much conflict and so much pain. But this feeling is probably due to the brevity with which the author states his thought. We need now another book from the same source, applying the religion of productivity to some of these concrete problems in more detail and fullness.

A. B. WOLFE.

*Oberlin College.*

*The Spirit of Social Work.* By EDWARD T. DEVINE. (New York: Charities Publication Committee. 1912. Pp. xi, 230. \$1.00.)

*The Spirit of Social Work* consists of a series of addresses upon various aspects of social reform, delivered during the past six years by Dr. Edward T. Devine. The subjects of these addresses cover a wide field, including substantial value of woman suffrage, the conservation of human life, certain aspects of the problem of crime and the police, the improvement of tenement houses, the religious treatment of poverty, and the dominant note in modern philanthropy. They were delivered usually before popular audiences, and were intended to arouse their hearers, not merely to understand modern social evils, but to fight against them. The subjects have been handled with lucidity, with vigor, with largeness of spirit, with a thorough understanding of practical conditions, and with an equally thorough philosophical grasp of the principles underlying the better modern philanthropy. Dr. Devine's definition of the dominant idea in these discourses is "a determination to seek out and to strike effectively at these organized forces of evil, at those particular causes of dependence and intolerable living conditions which are beyond the control of individuals whom they injure and whom they too often destroy"; and this quotation may stand as the keynote of the book.

HERBERT CROLY.

*Social Pathology.* By SAMUEL GEORGE SMITH. (New York: The Macmillan Company. 1911. Pp. viii, 380. \$2.00.)

Defining social pathology as "a study of social defeats," this book takes up in a brief but lucid manner the chief problems of the abnormal classes in America. Dr. Smith's point of approach is that of the experienced practical worker in social amelioration, but he has not ignored the important background of theory. Three fundamental principles are set forth in the preface: that both society and the individual are dominated by psychical influences; that the importance of the individual depends on social efficiency; and that the study of degeneration should be begun earlier in the career of the individual than it generally is, because it should deal with causation rather than with symptoms. Whatever the importance of heredity, Dr. Smith maintains that social environment is the primary factor to be studied in dealing with social failures,

since the chief problems of the individual are usually settled for him before he is fourteen.

The book places salutary emphasis on the principle that poverty is a relative term. It is even more elastic as a term than is standard of living. "Whether a man has a comfortable bed depends quite as much upon the man as it does upon the bed." Normality also is to be construed as a thing to be measured by group standards. Fitness for survival depends not on abstract moral worth but upon practical adaptation to the time and place in which the individual is placed.

The chief subject matter of the book falls into four divisions: Pathology of Condition (poverty), Pathology of Conduct (crime), Pathology of Mind, and Pathology of the Senses. The brief initial chapter of the first division on the Art of Living is particularly fruitful. Dr. Smith believes that thrift and economy should not be left wholly to individual choice, and holds that "a wise paternalism is the wisdom of the modern world."

A serious objection may be raised to the inclusion of so many problems within the scope of the book that several of them are little more than mentioned. Thus one chapter of twenty pages is made to cover the subjects of drunkenness, suicide, immigration, dissolution of the family, illegitimacy, and prostitution. The term social pathology is, in practical usage, gradually narrowing down to include those subjects which Dr. Smith has so ably treated in the first four divisions of his book. The same objection may be made to the chapter on Social Therapeutics, unless, indeed, the chapter on Eugenics be taken as supplementing it. To the claims of the new science, Dr. Smith accords only a limited recognition. Two fundamental difficulties with it are that the active elimination of the unfit would crush out the gentler virtues and make society cruel, and that we know and are likely to know too little of the laws of heredity to be able to predict what marriages would produce the most efficient offspring.

The book is well adapted for class use and is one of the best available for the general student of social problems. There is a compact bibliography and a carefully selected set of statistical tables bearing on social conditions in Europe and America.

ULYSSES G. WEATHERLY.

*University of Indiana.*

*The Philanthropic Work of Josephine Shaw Lowell; Containing a Biographical Sketch of her Life, together with a Selection of her Public Papers and Private Letters.* Collected and arranged for publication by WILLIAM RHINELANDER STEWART. (New York: The Macmillan Company. 1911. Pp. xvi, 584. \$2.00.)

Mr. Stewart, himself a colleague of Mrs. Lowell, and, as President of the New York State Board of Charities, conversant at first hand with much of her work, has made this book just what it ought to be. The story of Mrs. Lowell's social activities, beginning in her girlhood during the Civil War and continued till her death in 1905, typifies and illuminates the social development of the period, a development which she took a noteworthy part in shaping.

The enumeration of her activities suggests by their sequence the significance of the succeeding years and at the same time serves as the best guide to what material may be sought in this volume. The Woman's Central Association of Relief for the Army and Navy of the United States claimed her during the war; the Freedman's Association, immediately after. Then followed her work on the the Visiting Committee of Bellevue and other hospitals, which, with Miss Louisa Schuyler, she helped to form in 1872; her important work, from 1872 on, in connection with the State Charities Aid Association; her appointment in 1876 as the first woman commissioner of the New York State Board of Charities; and the founding, very largely through her efforts, of the New York Charity Organization Society in 1882. With this group of activities may be classified her manifold efforts for the improvement of public institutions and for a more intelligent and kindly treatment of their inmates; for the segregation of the different classes then herded in promiscuous poorhouses; for a separate reformatory for women; for state custodial care of feeble-minded women; for state care of all indigent insane (secured in 1898); for dependent children; for police matrons in station houses; for a labor test wood-yard (1887) and municipal lodging houses (1896); and the important relief work of the panic year 1893-4 in which her leadership was of nation-wide import.

In a somewhat different field lay her efforts on behalf of civil service reform (the Women's Auxiliary Association was formed by her in 1895 at the desire of Carl Schurz), of equal suffrage, and through the Woman's Municipal League of the City of New

York, organized by her efforts, for civic reform in the anti-Tammany campaigns of 1894 and 1897. She was actively interested in the movement for international peace, to which she gave herself especially at the time of the International Peace Congress in 1904, and in the cause of the Filipinos.

Her pioneer work in behalf of playgrounds and recreation piers began at least as far back as 1890. Even more modern is her interest in labor questions which led her in 1889 to withdraw from the State Board of Charities in order to give her time to this set of problems. Her pronouncements on prison labor, on strikes and conciliation, on "workingmen's rights in property created by them," and on the living wage, are interesting, sometimes surprisingly radical. An active friend of the Working Women's Society (organized 1886), she was first president of the Consumer's League (1891-96), and influential in securing such reforms as the appointment of women factory inspectors.

It is well that Mr. Stewart's volume contains so much of Mrs. Lowell's own direct and effective presentation of her views. The unanalyzable sense of personality which is the salt of all biography nobly savors this whole book.

EMILY GREENE BALCH.

*Wellesley College.*

*Social Conditions in Provincial Towns. First Series: Portsmouth; Worcester, Cambridge, Liverpool, Edinburgh, Oxford, Leeds.*  
Edited by MRS. BERNARD BOSANQUET. (London: Macmillan and Company. 1912. Pp. 82. 1s.)

In this little booklet several writers, each considering only one community, undertake to draw a brief verbal sketch of the social, economic, and sanitary conditions that prevail. For conciseness and graphic description of the housing problems, the problems of unemployment, morality, poverty, and vice, the work leaves little to be desired. From the point of view of the interest that the ordinary citizen may manifest in his own community these sketches may serve to rejuvenate some of the efforts, either local or national, towards solving the serious difficulties that are represented. The student of facts, however, will find that much that is said in the articles is based upon personal observation and opinion which cannot be verified by figures and other evidence which is usually presented in sociological studies of communities. The American

reader will find in this pamphlet description of conditions which might be duplicated in almost any city of the same size, and with similar industrial opportunities, in the United States. Each of the communities considered is typical of its kind and each presents social problems which are the result of its industrial development and its history.

CAROL ARONOVICI.

*Bureau of Social Research, Providence.*

*Grants in Aid: A Criticism and a Proposal.* By SIDNEY WEBB. (London, New York: Longmans, Green and Company. 1911. Pp. 129. 5s.)

The text fills 110 pages; a bibliography fills 19; the latter is chiefly of information bearing on grants for particular purposes, as finance and governments. This book seems to be, says Mr. Webb, the first one to appear as a treatise on grants in aid. The first sentence is that "The Grant in Aid," a device peculiar to English administration, has hitherto failed to receive the consideration that its practical importance deserves," and soon follows (page 3) the interesting statement that "if we seek to estimate the real as distinguished from the nominal constitution of the United Kingdom of the present day . . . we may come to the unexpected conclusion that the Grant in Aid, mere financial adjustment though it seems to be, is more and more becoming the pivot on which the machine really works." Mr. Webb's argument is plain. From the civil war of the middle of the seventeenth century to the middle of the nineteenth century, nearly all public administration was in local hands, and the central government left them alone: there was "an anarchy of local autonomy." Then, without theory and almost unnoticed, there grew up a way of securing national supervision and control, required in the interest of the community as a whole, without offending local autonomy and without losing the value of local initiative. By grants in aid, from the national exchequer, to one local governing body after another, for particular purposes, the national government bought rights of great import, for the general welfare. In 1830, the total annual payments of such nature, mostly odds and ends of historical survivals, were probably less than a hundred thousand pounds; now, the total for the United Kingdom is probably near thirty millions; and vast increases are likely.



The objects as usually given for these grants may be grouped as: for equitable mitigation of inequalities in financial burdens; to secure necessary supervision and control by the national government; to encourage the kinds of expenditures most desirable in the interest of the community as a whole. The chief object, of course, to social reformers is the possibility of thus securing a "national minimum" in the elements of civilization upon which the whole community should insist. For example, the Home Office has been able, through grants and supervision, to secure everywhere a national minimum of county constabulary: it has not been able to secure such in the field of child protection and nature, under abundant laws, because there is no provision for a central authority to supervise, with effectiveness, the local authorities. Public opinion is working in the way of national regulation through grants in the following services: public health, provision for the ill in mind and body, and all-round education of the child.

Student workers in the United States may well consider the thesis of this little book; for they must more and more face that vital problem of democracy—how to get local communities to use special knowledge in civics and social matters. We shall probably use more state coöperation and money with local authorities in matters of education and health. Mr. Webb well pleads for a truly educational use of such coöperation. England has so far failed too much in getting full returns for the large investment in grants. But the expression of the government's buying the right to regulate is not a helpful one. Logically carried out, the government could not regulate private agencies, as of education or charity, without the use of public money. We prefer the theory of a reasonable responsibility of the state for all its creatures, corporations public or private, without question of public money.

JEFFREY R. BRACKETT.

*Année Sociale Internationale, 1912. Troisième Année.* (Reims: Action Populaire. 1912. Pp. 768, 209. 9 fr.)

Much interesting information on current social questions is conveniently accessible in this volume. Its point of view, that of the Roman church, leads to but brief and unfavorable treatment of such a topic as socialism. Part I, dealing with the family, discusses vital statistics, housing, hygiene, moral and social problems

(alcoholism, obscenity, criminality), cost of living, woman. The discussion is of remedial and constructive developments, chiefly for France, much less elaborately for other countries. A similar procedure is followed in the subsequent parts: Trade Unionism, Labor Legislation, Socialism, Coöperation, Mutual and Social Insurance. In an appendix the year's developments are reviewed for each of a series of foreign countries. Authoritative sources of information seem in general to have been utilized. The brief special bibliographies scattered through the volume are valuable, but readers of another school of thought will desire to supplement them.

R. F. F.

#### NEW BOOKS

BAGNELL, R. *Economic and moral aspects of the liquor business and the rights and responsibilities of the state in the control thereof.* (New York: Funk & Wagnalls. 1912. Pp. viii, 178. 75c.)

DAVIS, B. M. *Agricultural education in the public schools.* (Chicago: University of Chicago Press. 1912. Pp. 163. \$1.)

DEHERME, G. *Les classes moyennes, étude sur le parasitisme social.* (Paris: Perrin & Cie. 1912. 3.50 fr.)

JEPHSON, A. W. *Municipal work from a christian standpoint. Christian Social Union handbook.* (London: Mowbray. 1912. Pp. 216. 2s.)

LINDEMANN, H. and SUDEKUM, A. *Kommunales Jahrbuch. Vierter Jahrgang 1911-1912.* (Jena: Fischer. 1912. 16 m.)  
Contains sections on housing, labor, charity, and taxation.

MONEY, C. *Things that matter. Papers upon subjects which are, or ought to be, under discussion.* (London: Methuen & Co. 1912. Pp. x, 229. 5s.)

These essays include questions relating to wages and industry, prices and the cost of living, education, insurance, emigration, and foreign investments.

NEARING, S. and N. M. S. *Woman and social progress. A discussion of the biologic, domestic, industrial, and social possibilities of American women.* (New York: Macmillan Co. \$1.50.)

RANO, D. *Como vive il popolo a Roma.* (Pescara: Croce. 1912. Pp. 923. 10 fr.)

Careful distinction is made between beggars and deserving poor. Numerous statistics are given. A second volume will treat of moral conditions.

REES, J. D. *Current political problems with pros and cons.* (New York: Longmans, Green & Co. 1912. Pp. 11, 423. \$1.40.)

SACHET, A. *Traité théorique et pratique de la législation sur les retraites ouvrières et paysannes.* (Paris: Larose. 1911.)

WERDENBERG, E. *Illustrationen zur Teuerungsfrage.* (Basel: Kober. 1912. Pp. 24, illus. 0.60 m.)

WHITIN, E. S. *Penal servitude.* (New York: National Committee on Prison Labor. 1912. Pp. iii, 162, viii. \$1.50.)  
To be reviewed.

WILSON, R. K. and LEVY, J. H. and others. *Individualism and the land question.* (London: Personal Rights Association. 1912. Pp. 120. 1s.)

WOLF, A. B. *Social problems, An analytical outline for students.* (Oberlin, Ohio: Oberlin College. 1911. Pp. 48.)

A well-arranged syllabus outlining several of the most important practical social problems. Intended primarily for class use. Has no bibliographies. The subjects presented are: population, immigration, marriage and divorce, the woman problem, and the race problem.  
U. G. W.

— *The great analysis. A plea for a rational world-order.* Introduction by G. MURRAY. (London: Methuen. 1912. Pp. xii, 122. 2s.)

— *Vocational training in Chicago.* (Chicago: City Club. 1912. \$1.50.)

### Insurance and Pensions

*Studies in Practical Life Insurance. An Examination of the Principles of Life Insurance as Applied in the Policies, Reports, Agency and Office Methods of the New York Life Insurance Company.* By JAMES M. HUDNUT. (New York: New York Life Insurance Company. 1911. Pp. 148.)

Notwithstanding the tendency toward uniformity in life insurance practice, there remain many details in which methods differ. Thus, while all companies allow surrender values, there is wide divergence in the methods of computing such values; while all companies are required to observe the "contribution principle" in apportioning dividends, each company follows its own interpretation; while the methods of loading net premiums do not, perhaps, defy classification, they are none the less various; while there are only two general methods of agency organization, there is not a little diversity in the relations of solicitors to the home office; and even in home office organization and routine there are naturally numerous adjustments to suit purely local convenience. Because

generalization is difficult and often impossible in regard to these matters, textbooks usually treat them inadequately.

There are, therefore, many advantages in departing from generalizations, and describing the methods of particular companies. In this way principles may be clarified by showing their concrete applications; the dependence of peculiar methods in one particular upon peculiar methods in other particulars may be shown; and the entire subject may be presented more vividly by actual rather than hypothetical illustrations. These are some of the merits of Mr. Hudnut's exposition. Special treatment is particularly appropriate in the case of the New York Life Insurance Company, since there are many characteristics which distinguish it from practically all of its rivals, among which are: its magnitude; its compliance with the laws of nearly every important state and nation; its great variety of special risks, including sub-standard, occupational, semi-tropical and tropical hazards; its agency organization, and methods of compensating solicitors; and its method of electing directors.

The author disclaims the intention of adding to the textbooks on life insurance. He proposes only to "take up a few representative policies, consider all their clauses and follow them through all possible phases of their history, showing what the company receives on account of them and what it does with the money." But these "Studies" present the subject more systematically than some more pretentious works. Moreover, in describing the contracts, the fundamental computations, the official reports, and the organization of his company, the author has produced an interesting monograph, simply and vividly written, but admirably explicit in its discussion of details.

The book includes a chapter by Darwin P. Kingsley, and an appendix containing the most important sections of the insurance law of New York.

WILLIAM H. PRICE.

*Yale University.*

*Insurance Science and Economics. A Practical Discussion of Present-Day Problems of Administration, Methods and Results.*  
By FREDERICK L. HOFFMAN. (New York: The Spectator Company. 1911. Pp. xiii, 366. \$3.00.)

Mr. Hoffman has covered a tremendous amount of literature in the preparation of this volume. He has drawn extensively upon

the physical sciences, philosophy, history, commerce, economics, besides the voluminous but scattered literature of insurance.

The book centers around three principal themes: (1) that the study of insurance is strictly a science; (2) that the business of insurance is commerce; in the United States it is properly interstate commerce, and as such should be taken from state and placed under federal control; (3) that the insurance business should not be taxed, except possibly its real estate; that in the United States taxation is particularly haphazard and burdensome and should be immediately reformed. The introduction and first two chapters center around theme one; the next three chapters around theme two; the next two around theme three. Chapter 8 makes a brief survey of the English Assurance Companies' Act of 1909. Chapter 9, the concluding chapter, is a discussion of averages.

The principal theme is the second. The Constitution of the United States gives Congress power to regulate interstate commerce; but, the Supreme Court of the United States holds that insurance is not commerce and is therefore not subject to federal control. Because of this view the control of the insurance business has fallen entirely to the individual states, resulting in multiplicity and divergence of legislation, greatly hampering the business and accomplishing little good. Control should be simplified and centralized, and for this purpose should be placed with the federal government. This, however, according to the Supreme Court, cannot be done. The Constitution does not say what is and what is not commerce; the Supreme Court has made its own opinion law. Mr. Hoffman shows by ample evidence that this opinion is contrary to common sense, the facts of history, expert judgment, and the practice in other countries—but unfortunately the court's view is the law of the land!

Mr. Hoffman makes also a great deal of the third theme—that the insurance business should not be taxed except perhaps its real estate. Here there is ample ground for difference of opinion. It is true that there is lack of uniformity in insurance taxation and that the taxes should not be levied upon premium receipts. The average life insurance tax in the United States is 2.15 per cent of premium receipts, which Mr. Hoffman considers exceedingly burdensome. On the face this rate does seem high. But, suppose we view the matter in another way. On its total admitted assets, the

New York Life, the largest life company in the country, pays a tax of only .002 per cent, or two mills on the dollar; this is approximately the rate paid by the Mutual, and the Equitable; five mills is certainly the maximum for life insurance as a whole. As taxes go, this rate is far from excessive.

It is not very clear why the three and a half billions of life insurance assets should go untaxed. These assets cover principally the reserves of policy holders, who for the most part belong to the middle and wealthy, and not to the poorer classes. If these assets had been placed anywhere else for investment, they would probably have had to pay taxes—why not insurance? Is the effect of paying taxes any different whether (say) \$500 is invested in a corporation bond or credited to the reserve of a life insurance policy? In either case you may say that the tax is on savings and thrift, and finally in case of death falls upon the family of the saver. Probably all taxes have these discouraging effects or attachments.

Two general criticisms should perhaps be added: (1) The title of the book is over-ambitious; it suggests a systematic treatment of the principles of insurance, and there is no such treatment. (2) The book is rather discursive and has unnecessary repetitions. Considerable material is included, which is interesting enough, but is quite extraneous to any clear-cut insurance discussion. But, in spite of criticism, the book is an exceedingly valuable one; it is clear, interesting, and suggestive.

JOHN BAUER.

*Cornell University.*

*Die Vorarbeiten zur Herstellung gemeinsamer deutscher Sterblichkeitstafeln.* By DR. SCHMERLER (Hamburg). Introduction by EUGEN LINDE (Magdeburg). (Berlin: Ernst Siegfried Mittler und Sohn. 1911. Pp. 80.)

This pamphlet was printed February, 1911, as Number XXII of the publications of the Deutschen Vereins für Versicherungs-Wissenschaft. As the title indicates, the brochure deals with the preliminary work preparatory to the somewhat elaborate and extended investigation which is now being made into the recent mortality experience of German life insurance companies. As will be quite apparent to any reader of this pamphlet, the present investigation of the combined mortality experience of such of the

German life offices as elect to furnish their quota of the material wanted has been planned and is being carried out in a manner quite characteristic of all German scientific research work. The German makes haste slowly but the results are usually well worth while and are more enduring than those achieved by less thorough, more careless and speedy methods. Perhaps the best recent illustration of German, in contrast to American, methods is to be found in a comparison of how the German insurance code was constructed in contrast with the ill-considered laws which emanated from the New York legislative mill in 1906 only a few months after the close of the Hughes investigation. In Germany the subject matter was threshed out item by item, was discussed by everyone competent to do so, and the exhaustive code was finally enacted into law only after years, rather than months of consideration.

Modern changes in mortality have been so pronounced that life companies everywhere have felt the need of possessing modern standard life tables against which to measure their mortality experience.

The mortality tables now in general use in Germany are based upon the combined experience of 23 German life offices to December 31, 1875, and were published in 1883. The unfavorable experience with annuity business apparently first raised the question as to the applicability of the old tables as efficient present-day standards for the measure of expected mortality. The subject was first seriously considered in October, 1905, when a commission of three members was appointed by the Vereins Deutscher Lebensversicherungs-Gesellschaften to investigate the matter in some detail. The late Dr. Schmerler of Hamburg was a member of this original commission; he took a very active part in all of the preliminary work, lived to see most of his recommendations adopted, and died as recently as April 14, of this year.

A fourth member was soon added to the commission and a first report was made in June, 1906. The membership of the commission was increased from time to time as the preliminary work advanced and it was found desirable to make use of all the expert talent readily available. Reports were made at quite frequent intervals from 1905 until March, 1910. The main results of these preliminary discussions may be stated briefly as follows:

1. It was found desirable that new mortality tables be constructed.
2. The question as to kind of tables—aggregate, select, or partly



select—was left for determination until the material should have been collected.

3. The new tables are to be constructed from records prepared and compiled according to absolutely uniform and well-defined rules.
4. The material is to be so collected that certain classes of risks may, if the facts warrant, be treated separately. These classes are to be in six groups: occupations, physical or personal peculiarities, heredity, previous sickness from specified causes, military service or non-service (males), and miscarriage or abortion (females).
5. The individual life offices are to write the cards, but the compilation of the data is to be done by a central bureau, the expense of which is to be borne pro rata by the contributing offices.

The existing life tables, and the similar investigations of the past and present in Germany, Austria, England, and the United States were all carefully reviewed and discussed by Dr. Schmerler and his colleagues during the five years of preliminary study; and finally, on March 1, 1910, the central bureau or office, located in Berlin, began its activity under the direction of Julius Altenburger, of Budapest.

That the present life tables used by German companies are based upon conditions which no longer obtain in German mortality was shown conclusively by comparing the male death-rates of those tables with the male death-rates of the new German life tables which are based upon the total population of the Empire, and upon the deaths during the decade 1891 to 1900. These latter rates were found to be lower up to age 65 than the rates in the combined experience tables of the 23 German offices, to December 31, 1875, and this was considered quite conclusive evidence that there had been a material reduction in the death-rate at all or nearly all of the insurable ages during the last thirty-five years.

In making up the mortality cards in the German investigation it is proposed to make provision for the study of several occupations, distinction being made of such dangerous and unhealthy trades and industries as yield sufficient deaths to make the compilation of the returns worth while. The question of occupation appealed so strongly to Dr. Schmerler that he suggested extending this inquiry so as to include such classes as chauffeurs, cement workers, powder-mill officials, wine-growers, etc., and, in fact, nearly all the well-defined trades or industries.

Risk-classes according to personal peculiarities are six in num-

ber, according as the insured has: (1) Emphysema, (2) curvature of the spine, (3) hernia, (4) neurasthenia, (5) pulse rate over 96, (6) slightly irregular pulse.

Risk-classes according to heredity are twelve in number, as follows: (1) Both parents living or dead at ages above 70, (2) both parents dead at ages below 50, (3) one of the parents dead or suffering from apoplexy below age 70, (4) from heart disease below 70, (5) from diabetes below 70, (6) from cancer below 70, (7) from tuberculosis below 70, (8) neither of the parents, but one or more of the brothers or sisters dead or suffering from tuberculosis, (9) both parents dead of tuberculosis, (10) insanity or epilepsy in the parents, brothers or sisters, (11) suicide, and (12) gout or chronic articular rheumatism in the parents, brothers or sisters.

The effect on mortality of previous sickness of applicants for life insurance is to be studied under twenty-two classes of diseases: (1) Acute catarrh, (2) discharge of blood by coughing, (3) pleurisy, (4) tuberculosis of joints, (5) scrofula, (6) hemorrhage of the lungs more than once, or within two years, (7) inflammatory rheumatism, (8) gout, (9) palpitation of the heart, (10) hemorrhage of the stomach, (haematemesis), (11) appendicitis (without operation) within the last two years, (12) appendicitis (without operation) more than two years previous to application for insurance), (13) gall stones or hepatic colic, (14) chronic jaundice, (15) casts, stones or gravel in the kidneys, (16) discharge from the ear, (17) nervous exhaustion or neurasthenia, (18) epilepsy, (19) bronchial asthma, (20) syphilis, (21) traces of sugar in the urine, (22) albumin in the urine.

The six military service classes are as follows: (1) Has not yet served, (2) has performed service required by law, (3) has been discharged on account of ill health, (4) rejected on account of incapacity, (5) rejected or excused for other reasons, (6) unknown whether in service or not.

Finally, the question is to be asked of women, whether or not there has ever been a miscarriage, or an abortion.

The German investigation is being conducted in a somewhat different manner than that now nearing completion in this country under the auspices of the Association of Medical Examiners and the Actuarial Society of America (Medico-Actuarial Mortality Investigation). Fewer classes will be dealt with in the German

investigation, but the classes are somewhat more clearly defined, and the returns from the contributing offices will be more uniform than the returns in the American investigation. Every item on the fundamental and supplementary cards is precisely defined in the German investigation and the definitions are furnished to every contributing office. On the other hand, in the American investigation considerable latitude is left to the various offices in the treatment of certain classes. For example, one of the occupation classes in the American investigation is "Teamsters, excluding those in the liquor trade," but the term is not further defined. The preparatory work, then, in the German investigation may be said to have been done in a very thorough manner and the ultimate results should yield some extremely valuable facts, which, with the results of the American investigation, should furnish a basis for medical and actuarial work such as has never previously been available in life insurance practice. The new life tables which undoubtedly will be constructed from the new materials will add greatly to the certainty with which a given mortality experience can be measured.

Insurance medicine is apt to gain most by these new investigations, for it is in that branch of life insurance practice that are found the widest gaps between what is known and what is unknown: between what are attainable and highly desirable facts and the present lamentable paucity of knowledge on subjects which should long since have been thoroughly investigated in the abundant materials ready at hand in the large experience of life offices both in this country and abroad.

F. S. CRUM.

*National Insurance.* By A. S. COMYNS CARR, W. H. STUART GARNETT, J. H. TAYLOR. Preface by the RIGHT HON. D. LLOYD GEORGE. (London: Macmillan and Company. 1912. Pp. xxx, 504. 6s.)

*Studies in Workmen's Insurance: Italy, Russia, Spain.* By I. M. RUBINOW. (New York: Columbia University Press. 1911. Pp. 1699-2376.)

*The Workmen's Insurance Code (Reichsversicherungsordnung) of July 19, 1911, of Germany.* A translation by HENRY J. HARRIS. (Washington: Government Printing Office. 1911.)

*National Insurance* is an exposition of the English National Insurance Act of 1911; it is intended primarily for the use of

those who are concerned with bringing the act into operation. Of its three authors, Mr. Carr and Mr. Garnett are barristers-at-law, and Mr. Taylor is a member of the council of the British Medical Association. Mr. Lloyd George contributes a preface of a couple of pages. By far the largest part of the book is devoted to the text of the act itself, so fully annotated, however, as to stretch it to many times its natural length. These notes are of a legal character and elucidate the putative meaning of the text by references to acts and statutes which again are listed in tables with cross-references to the notes. Some 100 pages, however, are devoted to a preliminary abstract and survey, from the various standpoints of the employer, the insured, and the physician, and as regards, in particular, the method of administration, the actuarial and financial problem and the moot questions of sanatorium benefits, maternity benefits and the public health.

Whatever else one gets from the book he cannot fail to be impressed with the very great complexity of the act, and the book, by its very attention to details, increases this effect. The first two chapters, to be sure, are intended to give a general notion of the scope and purpose of the act, but the authors, by attempting even here to chronicle exceptions and details, have failed to give an impression of the whole—perhaps that is impossible.

Those who have followed the discussion of the bill will remember the opposition it encountered from the medical profession. The points involved are here discussed very fully. What will be the ultimate relations of physicians to the public, not only under this act but under workmen's compensation, is a matter of conjecture. It is interesting to notice that, in getting rid of the ambulance-chasing lawyer in the passage from the principle of employer's liability to the principle of compensation, we may have introduced some new complications that involve the doctor.

The economic consequences of the English act must, of course, in the main wait to be revealed by experience; and what an interesting experience it will be! Nevertheless the framing of the bill required the exercise of exquisite economic imagination. For a plan of insurance is economically and sociologically unsound whose undercurrent does not steadily bear in the direction of prevention of the very ills that primarily it is designed merely to distribute. It is not difficult to catch glimpses of this purpose between the lines; this, the most fascinating aspect of the subject, is not within

the scope of the present work. The book is an excellent presentation of the law in its details.

*Studies in Workmen's Insurance* is Dr. Rubinow's contribution to the *Twenty-Fourth Annual Report of the United States Commissioner of Labor* on workmen's insurance and compensation systems in Europe; furthermore the book constitutes the author's dissertation for the degree of doctor of philosophy at Columbia University. This report contains undoubtedly the most valuable fund of information that is to be had for those reorganizations of the relations between employer and employed that have swept so suddenly into existence in this country.

The *Workmen's Insurance Code*, by Dr. Harris, is reprinted from "Bulletin" 96 of the United States Department of Labor; it is a translation of the German law of July 19, 1911, which is a codification of all the legislation relating to the several branches of workmen's insurance in the German Empire. Germany, as the pioneer of workmen's insurance, found it inadvisable to attempt to develop more than one form of insurance at a time, so that sickness insurance, accident insurance, invalidity insurance and old-age insurance were developed in turn and under a number of separate laws. The present law, the codification of 1911, represents, therefore, the mature embodiment of Germany's twenty-five years' experience.

A. W. WHITNEY.

*Accidental Injuries to Workmen with Reference to Workmen's Compensation Act of 1906.* By H. NORMAN BARNETT and CECIL E. SHAW. (New York: Rebman Company. 1911. Pp. vi, 376. \$2.50.)

This small volume is an analysis of the English Workmen's Compensation Act of 1906, with special reference to the medical problems involved. After a brief review of the scope of the act and definitions as laid down by the courts as to what constitutes an accidental injury, the authors point out the pitfalls into which the unwary may stumble. The act, for instance, takes no cognizance of the condition of the worker previous to the accident, and yet insurance companies will insure employers of a large number of working people against damages resulting from accidents to

their employees without knowing anything of the physical condition of such employees. This is a poor business policy, for an accident which to a healthy man, provided it does not involve a vital organ, is not a matter of serious moment may be the starting point of extremely serious consequences in a person who has some hereditary predisposition to disease, or who is already suffering from some disease. Employees suffering from arterial disease due to syphilis, from various rheumatic affections, from gout, Bright's disease, diseased condition of the blood vessels, from malignant disease or from alcoholism, may not have any symptoms or discomfort until some accident, trivial in itself, sets free a train of symptoms with disastrous consequences. Yet, in all such cases the accident cannot be regarded as the cause of the serious results following it. Employees, before entering employment, should therefore be examined to determine any conditions of ill health, in order that they may not receive compensation for diseases which would have developed had no accident occurred. Such employees should come under a special heading and should be paid only a portion of the compensation due to a previously healthy person. If all employees were examined, hereditary tendencies would be detected in many cases. The employer or the insurance companies would then be obliged to say whether they would take the risk of employing or insuring such persons.

The difficulties involved in the Workmen's Compensation Act relative to industrial diseases are still more numerous. There have been, thus far, few court decisions relative to the matter, and these have been contradictory. Thus, for instance, infection with the anthrax bacillus has been held to be not a necessary accompaniment of the woolcomber's trade and therefore an accident, and compensation was given. In the case of a sewer-worker, on the other hand, who was poisoned by gas, such an occurrence was judged to be a necessary accompaniment of his work, therefore not an accident, and no compensation was given. The schedule of industrial diseases in the Workmen's Compensation Act includes anthrax; lead, mercury, phosphorus and arsenical poisoning; ankylostomiasis; eczema; telegraphist's cramp; glassworker's cataract; and nystagmus. There are, however, other industrial diseases, such as actinomycosis; aniline poisoning; brassfounder's ague; caisson disease; carbon bisulphide poisoning; fibroid phthisis; and tetanus, besides many others held to be industrial diseases

within the meaning of the act, which would have to be left to the discretion of the courts.

Several chapters of the book are devoted to a brief description of the accidents which are apt to occur involving the various organs and tissues of the body.

This volume will be of interest to all persons interested in workmen's compensation for accidents and injuries, and to persons who are planning legislation similar in scope to the English Workmen's Compensation Act.

W. C. HANSON.

*State Board of Health, Massachusetts.*

*Kapitalanlagen der Versicherungsanstalten in Staatspapieren.* Veröffentlichungen des Deutschen Vereins für Versicherungswissenschaft, 21. (Berlin: Ernst Siegfried Mittler und Sohn. 1911. Pp. 56.)

*Grundzüge des Versicherungswesens.* By ALFRED MANES. (Leipzig: B. G. Teubner. 1911. Pp. vi, 141. 1.25 m.)

*Kritik des Entwurfs eines Versicherungsgesetzes für Angestellte.* Veröffentlichungen des Deutschen Vereins für Versicherungswissenschaft, 23. (Berlin: Ernst Siegfried Mittler und Sohn. 1911. Pp. 92.)

The first of these three books on insurance is an excellent discussion, by selected members of the association, on the investment of insurance funds in government securities, presenting its legal aspects, administrative difficulties, and fiscal and business effects, and also discussing the relation of insurance taxes to investment returns. From the point of view of insurance officials, government securities are frequently less to be preferred than corporate securities; and, to make a market for their securities, governments have, in some cases, taken advantage of their power of regulating insurance companies. In the United States a few states have attempted to "keep money in the state" by requiring a large percentage of the premiums collected in the state to be locally invested. European governments have also followed the policy to some extent. Buyers of insurance are, however, interested in securing good returns on their investments quite as much as in knowing that they are secure. Extensive tables are given, showing the character of the investments.

The second edition of the "Outlines of Insurance" by Manes,



does not in treatment exceed its title; it is a useful source of information, discussing concisely and clearly such topics as the following: development and organization, the contract, economic and social aspects, insurance departments, re-insurance, and different kinds of insurance including the ordinary life, accident, fire, security, live-stock, and the less known forms in this country—hail-storm and transport insurance. A bibliography of literature accompanies each chapter.

The *Kritik* is a discussion of the German working-man's insurance law, by selected members of the association. All phases are discussed—the conditions leading up to past legislation, the shortcomings of the past laws, and the prospective effect of the new law.

W. F. GEPHART.

#### NEW BOOKS

ANNAN, W. *The duties of employers under the national insurance act, 1911. With tables, specimen rulings and appendices.* (Edinburgh: Hodge. 1912. Pp. 231. 2s. 6d.)

BROWNE, E. and WOOD, H. K. *The law of national insurance.* (London: Sweet & Maxwell. 1912. Pp. xlv, 444. 7s. 6d.)

EVANS, L. W. *The national insurance act, 1911. Summary with explanatory chapters and full index.* (London: National Conservative Union. 1s.)

HABERMANN, M. *Versicherungsgesetz für Angestellte.* (Leipzig: C. E. Poeschel. 1911. Pp. viii, 168. 2.50 m.)

JACK, A. F. *An introduction to the history of life assurance.* (London: King. 1912. Pp. 276. 7s. 6d.)

KINGSLEY, D. P. *Militant life insurance and other addresses.* (New York: New York Life Insurance Co. 1911. Pp. 441.)

LEVI, M. *L'assicurazione sulla vita: saggio di economia politica.* (Feltre: P. Castaldi. 1911. Pp. 162. 2.50 l.)

MEYER, F. *Führer durch die Reichsversicherungsordnung nebst Einführungsgesetz. Abschnitt: Invaliden- und Hinterbliebenenversicherung.* Third edition, revised. (Berlin: Deutscher Verlag. 1912. Pp. 112. 1.25 m.)

MOORHOUSE, E. A. and WOODHOUSE, J. R. *National insurance act, 1911. Handbook for employers, with specimen account forms for working the act.* (Liverpool: Daily Post and Mercury. 1912. Pp. 44. 2s. 6d.)

RAABE, E. *Reichsversicherungsordnung und Privatangestelltenversicherung.* (Essen: G. D. Baedeker. 1912. 0.30 m.)

- *Recueil de documents relatifs aux assurances sur la vie, réunis par le ministère du travail, No. 5. Troisième rapport sur le fonctionnement du contrôle des sociétés d'assurances sur la vie et des sociétés de capitalisation, avec 6 graphiques.* (Paris: Berger-Levrault. 1912. 5 fr.)
- *Statistik des deutschen Reichs. Die Krankenversicherung im Jahre 1910.* (Berlin: Puttkammer & Mühlbrecht. 1911. Pp. v, 19, 81. 1.20 m.)

### Pauperism and Charities

#### NEW BOOKS

- CORE, C. *Essai sur l'extinction du paupérisme.* (Paris: Jouve et Cie. 1912. 0.60 fr.)
- DELPRAT, G. *La crise du libéralisme en matière d'assistance. Essai critique sur la loi d'assistance aux vieillards, infirmes et incurables, du 14 juillet, 1905.* (Paris: Giard et Brière. Pp. 92. 2 fr.)
- DOLE, C. F. *The burden of poverty; what to do.* (New York: Huebsch. 1912. Pp. 124. 50c.)
- *Paris charitable et bienfaisant.* (Paris: Plon-Nourrit et Cie. 1912. 5 fr.)
- *Stenographischer Bericht über die Verhandlungen der 31. Jahresversammlung des deutschen Vereins für Armenpflege und Wohltätigkeit am 20, und 21, 9. 1911 in Dresden.* Schriften des deutschen Vereins für Armenpflege und Wohltätigkeit, No. 96. (Leipzig: Duncker & Humblot. 1912. Pp. v, 150. 4.40 m.)

### Socialism and Co-operative Enterprises

#### Editor American Economic Review:

Mr. John Spargo in his *Socialism* (p. 10), discussing the origin of the words "socialism" and "socialist," says that, although the first known use in print was 1833, he has had oral information that Owen claimed to have used the words at least ten years before any other writer. There seems to be proof of this in the *Diary of William Owen*, edited by Joel W. Hiatt and printed in 1906 in the Indiana Historical Society publications. On November 21, 1824, (p. 32), Mr. Owen, being then in Philadelphia, recorded that "Mr. Loyd after dinner returned to the Mansion House with us (Robert Owen and William Owen) and we read to him the proposals for a socialist community." This very casual use of the word would seem to show that the Owens had for some time been accustomed to employ it.

HERBERT E. MILLS.

Vassar College.

*Leitfaden zu Vorlesungen über Geschichte und Methode der nationalökonomischen und sozialistischen Theorien.* By ADOLPH VON WENCKSTERN. (Leipzig: Duncker und Humblot. 1911. Pp. iv, 80. 2 m.)

In this reprint of a brochure first published in 1897, the theory of socialism as represented by Marx is brought into opposition to the theory of social reform advanced by Gossen and developed by Schmoller, Wagner, Brentano and other German economists. As Professor von Wenckstern well shows, Adam Smith was ethical philosopher as well as economist and the germs of modern theories of social reform are to be found in his writings. Undeserved reproach has been cast upon Adam Smith because of the one-sided development of his teachings by the classical economists and the Manchester School, who created what Carlyle was almost justified in calling the "dismal science." One of two conclusions might be drawn from their theories: either that they had discovered "eternal and immutable laws," or that the social organization based upon the institution of private property was rotten. The latter was the inference drawn by Marx.

Professor von Wenckstern has no quarrel with the labor-cost theory of value, which, he says, can be reconciled with the theory of Gossen and the Austrian School, for in both cases we have labor-cost or disutility on the one hand, and marginal utility or socially necessary production on the other. Marx would say: "Like quantities of work exchange for one another"; while Gossen would say: "Usually unlike quantities of work exchange for one another." These apparently contradictory statements are seen to be in harmony when one remembers that Marx has in mind "socially necessary labor," while Gossen is thinking of individual efforts not yet recognized as socially necessary. But Gossen and Marx are wholly at variance with regard to the theory of surplus value in which a false concept of an absolute value is confounded with a relative concept of exchange value. Marx makes no allowance for the calculating and speculating function of the capitalist-entrepreneur, without which labor would not result in the creation of social utilities. In production, value is created; in exchange, value is realized; and under the capitalistic system the entrepreneur who brings this result to pass is not an exploiter but a producer.

Gossen, like Marx, thought it conceivable that the progress of the capitalist class might result in the degradation of the working

class, but insisted that society could not dispense with private property and exchange value, which began with the dawn of civilization and without which men could not be induced to put forth their best efforts and an equitable adjustment of rewards to services would be impossible. Gossen was therefore strongly in favor of legislation for the protection and elevation of the working class.

Professor von Wenckstern has clearly shown that "the heart of the social problem is the problem of rights, especially the rights of labor," and that the justification of private property must be that it is essential to the welfare of the many, that is, the working class.

J. E. LE ROSSIGNOL.

*University of Nebraska.*

*Das Leben eines Landarbeiters.* By FRANZ REHBEIN. Edited by PAUL GOHRE. (Jena: Verlag Eugen Diederichs. 1911. Pp. 262. 3.50 m.)

It is to a personal experience of the editor of this series that we owe, with two others, this new volume. Göhre's "Three Months in a Workshop" appeared in its English dress in 1895. The author because he was secretary of the Evangelical Social Congress, perhaps because he was himself of very humble origin, was led from sympathy to pass three months in a machine shop in Saxony. The letters describing his experience, published in the "Christliche Welt," excited so keen and wide an interest that a book soon followed which created an extraordinary interest among prosperous folk. Colorless imitations soon appeared, but also the more serious purpose expressed in a series of workmen's biographies, of which the present by Franz Rehbein is the fourth. In 1903 came "Denkwürdigkeiten und Erinnerungen eines Arbeiters." The next year, in two parts, appeared the life story of a modern factory operative (W. Bromme); and in 1909, the life of a technical handworker (Wenzel Holek). Rehbein, the subject of this notice, did not, like the other three, write his book while he was at the work described. In 1895 his right arm was torn out by a steam threshing machine. Bitter days follow this experience. Like so many others in ill luck, he is taken in hand by the director of a socialist newspaper. Slowly he learns to write with the left hand. He is meantime in a journalistic atmosphere, and comes naturally to contribute items especially upon subjects connected with farm life. Three years later he is in Berlin on the "Vorwärts." In 1909, at 42 years of age, he

suddenly died, leaving a wife and six children. The present work had then been some few months finished.

In eleven chapters, the story deals with the minuter details of a hard life experience. It begins in the home of his father, a working tailor, where "thirteen coffee beans have to make fourteen cups." We follow him as a lad into East Pomerania; then as one of that vast multitude of contract laborers into Saxony. In Holstein he becomes Hütjunge for a small peasant; later Dienstjunge, and last Grossknecht. His three years in the cavalry (ch. 82) would make an invaluable document for the Peace Society. He becomes a social democrat "without knowing it," getting convictions from experience rather than from books—"dispossessing one both of personality and morals, so worthless seems to him the mechanism" of the army.

The story is told with graphic simplicity that reminds one of Gotthelf's famous "Uli, der Knecht." It is distinctively the intimate personal document with its limitations, but also with its persuasiveness and power. It is perhaps the one best worth translation.

JOHN GRAHAM BROOKS.

#### NEW BOOKS

- BERRY, W. H. *Our economic troubles and the way out; an answer to socialism.* (Chester, Pa.: J. Spencer. 1912. Pp. 147. \$1.)
- BOULEN, A. G. *Les idées solidaristes de Proudhon.* (Paris: Marchal et Godde.)
- BOYLE, J. *What is socialism?: an exposition and a criticism; with special reference to the movement in America and England.* (New York: Shakespeare Press. 1912. Pp. 347. \$1.50.)
- BRODA, R. and DEUTSCH, J. *Le prolétariat international. Etude de psychologie sociale.* (Paris: Giard & Brière. 1912. Pp. 254. 3 fr.)
- CARPENTER, C. *Copartnership in industry; with notes on over 200 British copartnership and profit-sharing schemes, 1829-1912.* (London: Copartnership Publishers, Ltd. 6d.)
- CERNESON, J. *Les associations ouvrières de production et le collectivisme.* (Paris: Giard & Brière. 1912. Pp. 20. 1 fr.)
- CHARNAY, M. *Les Allemanistes. Histoire des partis socialistes en France, Vol. V.* (Paris: Rivière. 1912. Pp. 112. 0.75 fr.)
- COMPÈRE-MOREL. *La question agraire et le socialisme.* (Paris: Rivière. 1912. 7.25 fr.)

- DEUMER, R. *Das Recht der eingetragenen Genossenschaften*. (Munich: Duncker & Humblot. 1912. Pp. xii, 430. 12 m.)
- DUMOT, E. *Socialismo cattolico, con prefazione di ARTURO LABRIOLA*. (Naples: F. Razzi. 1911. Pp. 87.)
- VON ELM, A. *Gewerkschaften und Genossenschaften*. (Hamburg: H. Kaufmann & Co. 1911.)
- GRAHAM, S. *Where socialism failed*. (London: Murray. 1912.)
- GUESDE, J. *Essai de catéchisme socialiste. Les documents du socialisme, No. 7*. (Paris: Rivière. 1912. Pp. 72.)
- HAUSENSTEIN, W. *Die grossen Utopisten (Fourier—Saint-Simon—Owen)*. (Berlin: Buchh. Vorwärts. 1912. Pp. 67. 1 m.)
- HERBERT, A. and LEVY, J. H. *Taxation and anarchism. A discussion*. (London: Personal Rights Association. 1912. Pp. 67.)
- HETZ, R. *Konsumvereine, Kleinhändler und Handwerker*. (Berlin: Puttkammer & Mühlbrecht. 1912. Pp. 76. 1 m.)
- HUBER, J. *Kapital und Verwaltungsbeteiligung der Arbeiter in den britischen Produktiv-Genossenschaften*. (Stuttgart: W. Kohlhammer. 1912. 5.50 m.)
- HUNTER, R. *Socialists at work*. (New York: Macmillan. 1912. Pp. 11, 374. 50c.)
- LABRIOLA, A. *Economia, socialismo, sindacalismo: alcuni scritti*. (Naples: F. Razzi. 1911. Pp. 224. 2 l.)
- LANDAUER, G. *Aufruf zum Sozialismus*. (Berlin: Verlag des sozialist Bundes. 1911. Pp. viii, 164. 2.50 m.)
- MARTENS, R. *Der Dialog mit dem Anarchisten*. (Charlottenburg: G. Bürkner. 1912. Pp. 170. 2.40 m.)
- MILHAUD, E. *L'économie publique, objet, méthode, programme de travail*. (Paris: Rivière. 1912. 0.50 fr.)
- MUTSCHLER, C. *Coopératives et syndicats. Documents du socialisme, No. 6*. (Paris: Rivière. 1912. Pp. 71. 0.75 fr.)
- NORTON, R. H. *Reminiscences of an agitator; with a diagnosis and a remedy for present economic conditions*. (Los Angeles: R. H. Norton. 1912. Pp. 91. 75c.)
- OTTO, B. *Der Zukunftsstaat als sozialistische Monarchie*. (Berlin: Puttkammer & Mühlbrecht. 1911. Pp. 483. 8 m.)
- PAINE, W. *Shop slavery and emancipation. A revolutionary appeal to the educated young men of the middle class*. Introduction by H. G. WELLS. (London: King. 1912. 1s.)
- PEREIRE, A. *Autour de Saint Simon*. (Paris: Champion. 1912.)
- SCHWIEDLAND, E. *Die Wirtschafts-genossenschaften*. (Vienna: Manz. 1912. Pp. 40. 1 m.)

- SOEMENS, A. *La mutualité en Belgique*. Second edition. (Brussels: V. F. Larcier. 1911.)
- SOMBART, W. "*Socialism and the social movement*." Translated from the German by DR. M. EPSTEIN. (London: Dent. 1912. 3s. 6d.)
- SOREL, G. *Réflexions sur la violence. Les illusions du progrès. La décomposition du Marxisme*. (Paris: Rivière. 1912.)
- SZERER, M. *Les premiers stades du processus de la socialisation*. (Paris: Giard & Brière. 1912. 1.50 fr.)
- THOMAS, A. *Coopératives et syndicats*. (Paris: Rivière. 1912.)
- WAYLAND, J. A. *Leaves of life; a story of twenty years of socialist agitation*. (Girard, Kan.: Appeal to Reason. 1912. Pp. 260.)
- WELLS, H. G. and others. *Socialism and the great state; essays in construction*. (New York: Harper. Pp. 6, 379. \$2.)
- . *Monographs on agricultural coöperation in various countries. Vol. I. Germany, Belgium, Denmark, British India, France, Great Britain and Ireland, Norway, Holland, Russia, Sweden*. International Institute of Agriculture: Bureau of Economic and Social Intelligence. (Rome. 1911. Pp. 451. 3.50 l.)

### Statistics and Its Methods

*The Mortality of Alcohol. A Statistical Approximation of the Deaths in the United States in Which Alcohol may Figure as a Causative or Contributory Factor.* By EDWARD BUNNELL PHELPS. Reprinted from the "American Underwriter Magazine and Insurance Review," Vol. XXXVI, No. 1, September, 1911. (New York: Thrift Publishing Company. 1911. Pp. vi, 75. \$2.)

We have in this study the first serious attempt to estimate the influence of alcohol upon the death-rate in the United States. The ingenious method was as follows: From the 187 causes of death which were given in the mortality statistics of the registration area of the United States, 106 were selected in which it was thought that alcohol might have had some influence in causing or hastening death. In the first estimate attempt was made to discover what share of the deaths of males between the ages of 20 and 74 from these 106 diseases was to be directly or remotely connected with alcohol. With this end in view the list was sent to three medical directors of insurance companies, who were requested to put opposite the name of each cause of death a personal estimate of the percentage of male deaths from that cause, between



the ages of 20 and 74, which presumably was directly or indirectly due to alcohol. When these estimates were received by the author he took the arithmetic average of the three estimates as representative of the medical opinion of the country at large. With this percentage and the number of male deaths between the ages of 20 and 74 in the registration area of the United States in 1908, it was a comparatively simple matter to obtain by multiplication the probable number of deaths between these ages which were directly or indirectly due to alcohol. According to this computation, 32,853 of the 198,858 male deaths between these ages, from the 106 causes of death included in the tables, were in whole or part due to alcohol; or 16.5 per cent of the total number of deaths in question. When deaths from all causes among males between the ages of 20 and 74 are considered, the percentage in which alcohol presumably figured becomes 13.2.

Up to this point deaths of males have been alone considered. A second assumption is now made: that the death-rate from alcohol among females was only one fifth as great as among males. When this factor is considered, the ratio of deaths for both sexes, in which alcohol presumably figured, is fixed at 8.4 per cent of the entire number of deaths at adult ages in the registration area.

The estimate is then extended to include both sexes at all ages in Continental United States in 1908, with the conclusion that alcohol may have been directly or indirectly responsible for about 66,000 deaths or 5.1 per cent of the total mortality from all causes at all ages. The accuracy of this estimate rests upon the reliability of the physicians' estimate of the percentage of male deaths, from each of these causes, which are directly or indirectly due to alcohol. In some cases the estimates of the three physicians are very close together, but in other cases far apart.

	Dr. X	Dr. Y	Dr. Z	Average
Heat and sunstroke	10	95	25	43
Tuberculosis of lungs	2	25	8	12
Chronic bronchitis	2	25	10	12
Hemorrhage of lungs	5	25	1	10

These are extreme cases but they show the lack of agreement between the physicians who made the estimate. In fact, in 79 out of 106 cases the estimate of Dr. Y was at least twice as great as

that of Dr. X, and in over a dozen cases it was at least 10 times as great. It seems somewhat doubtful whether the average of these three estimates could be accepted as equivalent to the consensus of medical opinion in the United States. Confidence in the estimates would have been increased if to these had been added the opinions of certain general practitioners in city and country and certain specialists in different sections of Continental United States. The estimate that alcohol is responsible for one fifth as many deaths among females as males is also somewhat rough.

A minister in New York City is reported to have stated recently from his pulpit that "liquor kills 440 out of every 1,000 every year." Until a scientific study of this important subject had been made, we were bound to have such crude estimates; but, thanks to this book, we now have an estimate which is reasonably close to the truth, and one which will at least afford a scientific basis for discussion.

W. B. BAILEY.

Yale University.

#### NEW BOOKS

BACHELIER, L. *Calcul des probabilités*. (Paris: Gauthier-Villars. 1912. Pp. 516. 25 fr.)

KING, W. I. *The elements of statistical method*. (New York: Macmillan. 1912. Pp. xvi, 250. \$1.50.)

To be reviewed.

VON MAYR, G., editor. *Die Statistik in Deutschland nach ihrem heutigen Stand*. Two volumes. (Munich & Berlin: J. Schweitzer. 1912. 42 m.; 45 m.)

VON MAYR, G. *Statistik und Gesellschaftslehre*. Reprinted from *Handbuch des öffentlichen Rechts*. (Tübingen: J. C. B. Mohr. 1912. Pp. 449-576. 3.40 m.)

SCHNAPPER-ARNDT, G. *Sozialstatistik, Vorlesungen über Bevölkerungslehre, Wirtschafts- und Moralstatistik*. (Leipzig: Werner Klinkhardt. 1912. 6 m.)

SILBERGLEIT, H. *Das statistische Amt der Stadt Berlin 1862-1912*. Im Auftrage der Deputation für Statistik in kurzem Abdruck dargestellt. (Berlin: Gebrüder Grunert. 1912. Pp. iv, 81.)

——— *Zur Geschichte der hessischen Statistik und ihrer amtlichen Organisation*. (Darmstadt. 1911. Pp. 72.)

——— *Statistisches Jahrbuch für das Deutsche Reich, 32 Jahrgang 1911*. (Berlin: Puttkammer & Mühlbrecht. 1912. Pp. xxxii, 497, 77. 2 m.)

## DOCUMENTS, REPORTS, AND LEGISLATION

### Industries and Commerce

**OUR TRUE TRADE BALANCE WITH THE WORLD.** No feature of international trade presents so many interesting problems to the economist as the attempt to establish a satisfactory equation of indebtedness between a great commercial power like the United States and the remainder of the world. The task involves every phase of the complex business relations between modern nations, their social intercourse, and the commercial policies of their governments.

During the fiscal year ended June 30, 1910 (the latest period for which complete statistics are available) the balance of payments between the United States and foreign countries was as follows:

#### FOREIGN COUNTRIES IN ACCOUNT WITH THE UNITED STATES FISCAL YEAR 1910.

No. of item	<i>Debit</i> Description	Value, actual or estimated
1.	Imports of merchandise into United States for consumption (actual) .....	\$1,557,000,000
2.	Undiscovered smuggling (estimated) .....	5,000,000
3.	Undiscovered undervaluation (estimated) .....	20,000,000
4.	Imports of gold and silver into United States (act.) ...	88,000,000
5.	Share of ocean freights earned by foreign vessels in carriage of commerce of United States and paid by traders of this country (est.) .....	60,000,000
6.	Share of foreign import duties on American goods (total duties \$140,000,000) paid by American exporters (est.) ..	56,000,000
7.	Foreign tonnage duties and local charges paid by American vessels abroad (est.) .....	2,000,000
8.	Coaling and provisioning of American vessels in foreign ports (est.) .....	2,000,000
9.	Payments by United States Government to foreign steamship companies for transportation of ocean mails (act.)...	1,400,000
10.	Expenditures of American tourists in foreign countries, for passage money, hotel bills, railway transportation, amusements, and other miscellaneous services, but exclusive of purchases of jewelry, clothing, and other articles subsequently declared or smuggled in on return to United States (est.) .....	200,000,000
11.	Remittances by American citizens for education of children in foreign countries (est.) .....	5,000,000
12.	Remittances abroad by aliens and foreign-born citizens: (a) International money orders certified for payment in foreign countries (act.) \$89,300,000;	

*Debit, continued*

	(b) United States domestic orders paid in foreign countries (act.)	\$10,200,000;	
	(c) Drafts by regular and private banks (est.)	\$120,000,000;	
	(d) Express companies' orders and steamship companies' travellers checks (est.)	\$25,000,000;	
	(e) Consular offices, beneficial societies, and other agencies (est.)	\$14,000,000;	
	(f) Currency sent by mail (est.)	\$2,000,000; total	260,500,000
13.	Money carried home by emigrant aliens (est.)		60,000,000
14.	Investments of American capital in foreign countries made during the year (est.)		50,000,000
15.	Income of foreigners from investments of their capital in United States, including income of self-expatriated Americans from their investments in this country—4½ per cent of \$6,000,000,000 (est.)		270,000,000
Total Debit			\$2,636,900,000

*Credit*

No. of item	Description	Value, actual or estimated
1.	Exports of domestic merchandise from United States (profit in handling exports of foreign merchandise from this country may be ignored as counterbalanced by our imports in transit) (act.)	\$1,710,000,000
2.	Smuggling and undervaluation of American exports (est.)	5,000,000
3.	Domestic exports of gold and silver from United States (act.)	168,000,000
4.	Earnings of American vessels in carriage of foreign goods (est.)	10,000,000
5.	Share of United States import duties (total \$326,000,000) borne by foreign exporters (est.)	130,000,000
6.	United States tonnage duties and local charges in American ports paid by foreign vessels (partly est.)	5,000,000
7.	Coaling and provisioning of foreign vessels in American ports (est.)	15,000,000
8.	Expenditures by foreign tourists in United States (est.)	40,000,000
9.	Remittances by foreigners to relatives and friends in United States (partly est.)	75,000,000
	(a) money orders paid in United States (act.);	\$27,245,000
	(b) bank drafts and currency	\$47,755,000 (est.)
10.	Money brought into United States by immigrant aliens:	
	(a) amount actually seen by United States inspectors	\$28,198,000;
	(b) undisclosed	\$6,802,000 (est.)
		35,000,000

*Credit, continued*

11. Investments of foreign capital in United States made during the year (est.) .....	150,000,000
12. Income of American citizens from their investments of capital in foreign countries—5 per cent of \$1,800,000,000 (est.) .....	90,000,000
Total Credit .....	\$2,433,000,000
Net Debit .....	203,900,000

It will be noted that the exports of domestic merchandise exceeded the imports for consumption by \$153,000,000. According to the above statement this respectably favorable balance has actually been converted into an unfavorable net balance of \$203,000,000. The showing for the United States, however, in the fiscal year ended June 30, 1911, would be far better, as would appear if complete statistics were available. With domestic exports of \$2,013,000,000, and imports \$1,527,000,000, the favorable mercantile balance reached the unusual sum of \$486,000,000, which would be difficult to offset by the other large items. In fact, I feel confident that the net balance of payments was several millions in favor of the United States. While it is undoubtedly true that the Brussels Exposition, the Passion Play, and the Coronation were factors in augmenting the debit item of expenditures of American tourists, this increase was more than counterbalanced by diminished remittances of our foreign-born population in the fiscal year 1911, due largely to the upward trend in the cost of living. I feel sure, too, that the energetic activities of our customs authorities, particularly at the port of New York, were responsible for a substantial reduction in the debit items of smuggling and undervaluation considered as correctives of the declared valuation of imports into the United States.

It is reasonable to conclude from a study of the above analysis of the elements in the equation of international indebtedness that the United States, instead of being a creditor nation, has been, in recent years, a debtor nation. This situation was undoubtedly changed in the fiscal year 1911, and this change was further emphasized in the fiscal year ending June 30, 1912, since the excess of domestic exports over imports for consumption rose to \$516,800,000. Some of my estimates—particularly those relating to the incidence of taxation and the distribution of ocean freights—may be regarded as vulnerable and within the realm of controversial questions; but the analysis may safely be accepted as showing that it is highly desirable that the exports of American products to foreign countries be maintained above the two-billion-dollar

mark, in order that there may be a sufficiently large margin to absorb the various important debit items against the United States which I have enumerated. The situation, therefore, justifies fully the present earnest and energetic trade promotion policy of the government of the United States.

JOHN BALL OSBORNE.

*Department of State, Washington.*

In the REVIEW for June, 1912 (p. 423), reference was made to the reports on the operation of the Panama Canal. Additional documentary material on this subject has appeared consisting of hearings before the Committee on Interstate and Foreign Commerce of the House of Representatives on *The Panama Canal*, in five volumes (Washington, 1912, pp. 1127); and hearings before the Committee on Inter-oceanic Canals, United States Senate, on *The Panama Canal* (Washington, 1912, pp. 928). There is a large amount of evidence on regulation of rates, control of steamship lines of railroads, and costs of ship-building in the United States and foreign countries. The testimony of Professor Emory R. Johnson appears in the Senate report (pp. 16-40).

Among recent documents relative to parcels post are to be mentioned: *Postal Express as a Solution of the Parcels Post, and High Cost of Living Problems*, by David J. Lewis, M.C. (Sen. Doc. No. 379, 62 Cong., 2 Sess., pp. 97); *The Parcels Post and Postal Express Situation in Congress*, by Senator Gardner (Sen. Doc. No. 490, 62 Cong., 2 Sess., pp. 6); *Parcels-Post System; Bills Introduced during the Present Congress* (Sen. Doc. No. 430, pp. 30); *Charges for Transportation of Parcels by Express Companies* (H. Rep., No. 485, 62 Cong., 2 Sess., pp. 3).

In the *Tenth Annual Report of the Reclamation Service*, by F. H. Newell, director (Washington, 1912, pp. 290), is given a summary of reclamation legislation and a description of the various projects in operation, including a statement of financial transactions involved in the work since its beginning.

The *Oleomargarine* hearings before the Committee on Agriculture on bills proposing to amend the oleomargarine laws (H. R., 1912, pp. 261) will be of considerable service to the student of agricultural conditions. The relation of the beef trust to oleomargarine is also touched upon.

The Department of Agriculture, in Bulletin No. 238, Bureau of Plant Industry, gives an account of the most recent experiments at Pinchurst, South Carolina, in *The Cultivation and Manufacture of Tea in the United States* (Washington, February 15, 1912, pp. 40). Provided sufficient capital is invested pending development over a considerable period, such culture is regarded as a successful possibility.

The *Annual Report of the State Board of Conciliation and Arbitration of Massachusetts*, for 1911 (Boston, Pub. Doc. No. 40, 1912, pp. 192), contains an interesting case bearing upon the question of the distribution of milk in a metropolitan city (pp. 150-156).

The American Woolen Company (Boston, Mass.) has published a little pamphlet, *From Wool to Cloth*, in which the different processes are briefly described with numerous illustrations.

A considerable amount of descriptive and statistical information concerning the economic resources of Canada may be found in a memorial volume, *Le Canada et la France, 1886-1911*, published by the Chambre de Commerce française of Montreal (pp. 256). Special consideration is given to commercial relations with France.

*Bulletin 114* of the Bureau of the Census on cotton production, 1911 (pp. 61) continues the reports on this industry which have now been published for thirteen years. Useful summaries are provided not only with regard to domestic conditions but also concerning foreign production.

*The Year Book, 1912* of the Merchants' Association of New York (54 Lafayette St., pp. 117) furnishes a concise document of important commercial questions which have recently received public attention.

The same is true of the *Annual Report of the Boston Chamber of Commerce for 1911* (Boston, 1912, pp. 367).

#### Corporations

THE WATER POWER SITUATION IN WISCONSIN. In June, 1911, Wisconsin enacted a general water-power act defining the rights of riparian owners and regulating the improvement of navigation and development of hydraulic power in Wisconsin streams. The entire act was declared unconstitutional by the Wisconsin Supreme Court in January, 1912. (*State vs. Bancroft*, 134 N. W. Rep. 330.) A brief statement of the law of Wisconsin concerning riparian rights in navigable waters will serve to explain the grounds of the decision. The



Supreme Court of Wisconsin, as the courts in many other states, early held that the patentee of lands bordering on streams, acquired title to the bed thereof to the center. As to lakes, however, it was held that the bed belonged to the state. Since riparian rights depend on the ownership of the bank, rather than of the bed, the title to the submerged land should be of no great significance. It was also held that all waters navigable in fact were public waters; not that the public owned the waters, but that the public had certain rights of use, such as navigation and fishing. Navigable water means floatable water. Any waters which during any portion of the year are of sufficient volume to float to market the products of the soil—and that meant, in the earlier history of the state, timber—are deemed navigable. The riparian rights and the public rights do not pertain to the water itself, but merely to the use thereof. Each riparian is entitled to use the water as it flows by, leaving it to pass on unaffected in volume and purity. The public right, while it pertains only to the use, has always been held to be paramount to the private right, and may be pursued to the serious impairment, or even total extinguishment, of the private right. For example, in order to improve streams for navigation, the private riparian right to access, to uniform stream flow, and to hydraulic power have been entirely destroyed without compensation.

By reason of the public right of navigation in practically all the streams of the state, a statute was passed very early forbidding any obstruction in navigable streams without authority from the legislature. Each riparian owner on either bank is entitled to the benefit of the water as it subsists in its natural state. No single proprietor has a right to make use of the flow in such a manner as will be to the prejudice of any other proprietor; and he has no more right to apply it to a purpose which occasions a return of the water on the land above than he has to cause a diminution of the water below. That water-power to which a riparian owner is entitled consists merely of the fall in the stream when in its natural state as it passes through his land or along the border of it. As between riparian owners a water-power is a potentiality. A riparian owner has no right to a water-power as such. He has as against other riparian owners a right to the natural and customary flow of the stream. If the stream in its natural condition with a reasonable interference with its flow will produce within the limits of his land a practical amount of power, then, as against other riparian owners or third parties, such beneficial use belongs to the

riparian. If, however, in order to get sufficient power, he is obliged to change in the least degree the natural level of the water, or interfere with or manipulate its flow unreasonably, or in any way interfere with or invade the public right of use, he has no water-power; for this would involve an invasion of reciprocal rights of adjoining riparian owners, and would be an encroachment upon the paramount public right of use. In many situations there was not found within the limits of a single riparian owner a sufficient fall of the stream in its natural condition to produce a practical amount of power. A change in the natural level of the stream being an encroachment upon the rights of other riparians constituted a tort.

In all navigable streams where the public right of use for navigation exists, the development of hydraulic power required in most instances the building of a dam in the channel of the stream, which could be done only under state permission and control. The development of effective water-power, therefore, was found in most instances impracticable without a serious encroachment upon the rights of others and of the public. Because of the practical difficulty of obtaining an adequate water-power by the exercise of strictly riparian rights (the consent of adjoining riparian owners being difficult or impossible to secure), and because of the public right of navigation and the statute forbidding all obstruction in navigable streams, it became necessary for a riparian owner to appeal to the state in order, first, to secure the state's prerogative of eminent domain to enable him to obtain the rights of adjoining owners, and, second, to secure the state's consent to his obstructing the stream by a dam. The power of eminent domain can be conferred only to promote a public purpose. The navigable character of the streams must be preserved. Therefore the riparian owners very early in the history of the state began to ask the state for a franchise to improve navigation. This being a confessedly public work could be aided by eminent domain. Navigation being a paramount public right, the improvement thereof could be carried on to the extinguishment of the private riparian rights of use. At the outset most of the grants of franchises by the state were in reality to improve navigation. Timber was the chief asset and lumbering was the principal industry. It became necessary to improve the streams for floating logs. Such improvements were carried on freely to the total extinguishment in many cases of private riparian rights. In time, however, the improvement of navigation became largely a fiction. The grant was really to enable

riparian owners to secure an adequate development of water-power. Many of the dams erected at an early day as actual improvements of navigation for lumbering were later turned to use for developing power. The fiction of improving navigation has generally been retained in the legislative grants, thus, in form, satisfying the requirement of a public work as a condition for enjoying the right of eminent domain. By thus undertaking the improvement of navigation, the riparian owner in very many instances was enabled to secure an adequate water-power when no such power existed naturally within the limits of his riparian land. Most of the water-power development up to the present time has been under the fiction of improving navigation, in which work the grantee has usually enjoyed the state's right of eminent domain, which has enabled him to secure the necessary flooding rights against other riparian owners, and thus produce an adequate flow of water within the limits of his own land. Very few of the existing water-powers are the result of the exercise of strictly riparian rights unaided by the state's prerogative.

The purpose of the Act of 1911 was to enact into a single statute under uniform administration the legislative practice of the past fifty years with respect to granting franchises for the improvement of navigation. Instead of promiscuous grants of such franchises by special acts at each session, the new law provided a general form of franchise for the improvement of navigation, such franchises to be granted upon certain findings made by the railroad commission. Inasmuch as the scope of the public right of use had never been exhaustively defined, the act also embodied a declaration that all public waters, that is, all navigable waters, were subject to all legitimate public uses, including the use for the development of hydraulic power. The use of the water for power was declared to be a public use, and was held by the state in trust for all the people. The franchises under the new act were to be for the improvement of navigation, and also for the development of hydraulic power. Preference was to be given to riparian owners in making grants, but if no riparian owners applied or if the improvement proposed by them was not deemed most advantageous to the public, the grant might be to non-riparian owners. In considering what improvement was most advantageous, the amount of hydraulic power capable of being developed thereby and the uses to which it could be put were to be taken into consideration. The grantee was permitted to use the hydraulic power produced by the improvement of navigation, and might be required to develop and convert into electric form all the

power of which the improvement was capable. Such power as the grantee did not need for his own uses, he was required to sell to the public at a reasonable rate. The grantee of a franchise was required to pay to the state a small graduated annual franchise tax. Franchises were to exist for twenty years with the privilege of renewal for two periods of ten years each. At the expiration of a franchise, the holder might apply for a new grant. In case no application was made, a franchise might be conferred upon any third person not a riparian, under the same terms and conditions as the original franchise, such grantee being authorized to take the land and improvements of the retiring riparian. The compensation to be paid, in such case, however, was not the present value of the land and improvements, but the value at the time that the franchise was originally granted. All existing franchises that were repealable were declared to be repealed. About two thirds of the existing franchises were by their express terms subject to alteration, amendment, or repeal. The dams and improvements maintained under the repealed franchises were declared to be nuisances, and their maintenance, a misdemeanor, unless the owners thereof applied for and received a franchise under the new act; in case no application was made, a franchise might be granted to any third person, who was thus authorized to acquire the existing dams and improvements upon paying just compensation therefor.

As to the repealed franchises, the court interpreted the act as in effect confiscating the improvements made during the existence of the franchise; the public continued to use the improvements, leaving the owner the option of applying for a franchise under the new act, and making it subject to numerous conditions not before applicable to him; or if he did not apply, declaring his property a nuisance, without the protection of the law, and subject to abatement, unless some third party should apply for and be granted a franchise and should take over his improvements and continue to maintain them in aid of navigation. The court says there was no assurance that any other person would apply, and that the riparian owner must either lose the value of his improvements or hold them himself under a new franchise containing onerous conditions. This the court regarded as virtual confiscation. Furthermore, even if a third party should apply and be granted a franchise, the act authorized him to take the dam and improvements, paying the retiring proprietor a just compensation, but authorizing him to use the hydraulic power for private purposes. As to the grants of franchises for new development, the court held the act invalid, because it author-

ized persons not riparian owners to apply for leave to make improvements of navigation and to appropriate the water-power produced thereby for private purposes. The court holds that the state has no salable or demisable right as against a riparian owner with respect to the water-power, which it can thus confer upon third parties.

"The right of the riparian owner to use the water of the river on his own land within his boundary determined by ordinary high water mark, for the purpose of creating power . . . . is unquestionably a private right appurtenant to the riparian land. . . . It is conceded there is such a riparian right as the right to use the water for power, and also that this right is to be exercised in subordination to the public right of navigation and the necessary accessories of the latter. We say that if the exercise of this riparian right in the judgment of the legislature interferes with the public right of navigation, it may be forbidden. . . . Where the ownership of the bank is essential to the construction of a dam or the creation or development of a water power, the state is as helpless to use, sell or lease such right without condemnation and compensation as the riparian owner is to intrude into the navigable stream without consent of the state. It requires the concurrence of the riparian owner, and the state in such case to make the water power efficient and this right of the riparian owner to refuse to concur and stand out for compensation in the case mentioned is a private property right and often gives to such land its chief value. The state may refuse its permission to the riparian owner to build a dam and may attach conditions to its consent such as the height, strength, mode of construction, etc., of the dam, and perhaps other conditions, but it may not seize upon this right without compensation and use it or sell it or lease it to another. It cannot authorize the use and enjoyment of this right by a person not a riparian owner for a private purpose without the consent of the riparian owner nor for a public purpose without condemnation and compensation to the riparian owner. . . . These premises support the conclusion that the act in question attempts to deprive the owners of improved riparian land and of the resulting water power and owners of unimproved riparian land with its appurtenant water power privileges and advantages, of property without due process of law; that it attempts to authorize the taking of private property for private purposes; and that it attempts to take property without just compensation."

E. A. GILMORE.

*Madison, Wisconsin.*

**THE PATENT LAW DECISION.** The decision of the Supreme Court in the case of *Henry vs. The A. B. Dick Company*, rendered on March 11, 1912, makes the patent law a most powerful agency in extending the rights of patentees and raises so serious a question in regard to the future development of our industries that a recasting of our patent law may be necessary. A rotary mimeograph was sold with a license restriction as follows: "This machine is sold by the A. B. Dick Company with the license restriction that it may be used only with the stencil paper, ink and other supplies made by the A. B. Dick Company, Chicago, U. S. A." The purchaser of the rotary mimeograph bought a can of ink from Henry with the purpose of using it on the rotary mimeograph, and the said Henry knew of the purchaser's intention. It was contended that the act of Mr. Henry constituted contributory infringement of the A. B. Dick Company's rights under the patent law. The Supreme Court, by a decision of four to three, decided in favor of the A. B. Dick Company; Chief Justice White dissented, and his opinion was concurred in by Justice Hughes and Justice Lamar; Justice Day did not hear the argument; and Justice Pitney had not at that time taken his seat.

The real question at law was, as it appears from the decision, as follows: Is a license restriction, such as that imposed by the A. B. Dick Company, a right arising under the patent law or a contract between the parties? If the former, then the case comes under the jurisdiction of the federal courts; if the latter, then under the jurisdiction of the state courts. Mr. Justice Lurton, who wrote the opinion for the majority, argued that it had been fully settled by a long line of decisions that the patentee may restrict the time, place, and manner of using a patented machine by a lease or by a conditional sale; and, since the courts have held that the property right in the materials and the right to use the patented article for the purpose for which it was intended, are different and separable rights, that, consequently, the patentee may sell the property right in the materials, thus parting with the ownership, and retain a conditional control over the use of the article, the material of which has been sold. Basing his decision upon the cases where patented articles have been sold under licenses, he concludes that the intention of the patent law is to give an exclusive monopoly of the articles during a limited period to the owner, and that therefore, provided the purchaser has notice of the restriction, the patentee may impose whatever restriction he chooses. The rights of the patentee in his article, the court holds, extend even to the entire

suppressing of its manufacture and sale; and on this theory, since a conditional sale constitutes a less restriction upon the use of the patented article than its entire suppression, the court holds that any condition connected with its use may be imposed. In support of his argument, Mr. Justice Lurton cites the Button Fastener Case (77 Fed. 288), The National Harrow Case (186 U. S. 70), The Paper Bag Case (210 U. S. 405), The Graphophone Case (92 Fed. 516), and many others. Furthermore the court argues that if the present decision in favor of the license restriction is injurious to the public interests, the Congress of the United States which has granted the monopoly under the patent law, is the proper party to correct the evils in the present situation rather than the courts.

Chief Justice White, in his dissenting opinion, is influenced, as it appears, by the effect which an affirmative decision is likely to have upon the jurisdiction of the federal and state courts, and holds that the decision of the court will destroy in a large measure the judicial authority of the states by unwarrantedly extending the federal judicial power; that the principle laid down in Justice Lurton's opinion will be "as broad as society; capable of operating upon every conceivable subject of every human interest or activity, however local and exclusively within state authority it may be," and further that it makes it the duty of the federal courts to test rights and obligations of parties, not by the general law of the land, but by the provisions of the patent law. The Chief Justice in support of his argument also cites a long list of cases which are favorable to his contention and objects to the reasoning of the court by which the patent law is made to embrace articles which are not patented, but which, as a result, are included within the protection of the patent law. This he holds to be the exercise by the courts of legislative power of a far-reaching and dangerous character. The patent he believes is solely upon the machine, and any control over the materials to be used with it must arise as a result of an agreement between the parties, and the agreement is legally protected, if at all, under the general laws of the land.

In view of the conflicting opinions of the Supreme Court in previous cases, and of the well-known purpose for which the patent law was enacted, *viz.*, to encourage the invention and sale of improved machinery, it would seem to the layman that the courts by a series of decisions, each of which raised a slightly different question of law, had extended the meaning of the patent law far beyond its original scope and purpose, and to a large extent had defeated its fundamental object.



If, however, the decision of the majority is in accordance with the previous decisions, of which there is at least a reasonable doubt, the Chief Justice and those who concurred with him have done a large public service in calling attention to the paramount need for the revision of the patent law by act of Congress.

MAURICE H. ROBINSON.

*University of Illinois.*

*Hearings before the Committee on the Judiciary: Trust Legislation, Patent Legislation* (62 Cong., 2 Sess., 1911-1912, H. R. 11380, 11381, 15926, 19959, and Appendix), like more than one congressional report, has a misleading title. It should rather have been named "Hearings on the United Shoe Machinery Company."

The prime object of the investigation was to ascertain the practicability of applying the Thayer or Lenroot<sup>1</sup> bills or the Peters measure to supplement the Sherman Anti-trust Act. Such was the purpose of the hearings, but they resolved themselves into an examination of the United Shoe Machinery Company with Louis D. Brandeis as "star" witness against the monopoly.

So far as the evidence of various manufacturers is concerned there is little in the *Hearings* that was not brought out in one form or another before the Senate Committee on Interstate Commerce. The *questionnaire* sent out by the Boston News Bureau for the purpose of ascertaining the attitude of the various shoe manufacturers toward the United Shoe Machinery Company was introduced into the evidence. This reveals the fact that an overwhelming weight of opinion does not believe the corporation to have been detrimental to the interests of the manufacturers; and early in the hearings, Mr. Littlefield, counsel for the company, practically forced Mr. Brandeis to admit that the elimination of the United Shoe Machinery Company would scarcely cause a decline in the price of shoes, or, if so, only most indirectly. Incidentally Mr. Littlefield's cross-questioning was one of the interesting features of the hearings. Formerly congressman from Maine, he is gifted with a large share of Yankee shrewdness, and at times his questions were disconcerting and most difficult to answer.

An unprejudiced reader may seriously doubt, after a careful perusal of the *Hearings*, the wisdom of the bill proposed. Few will sympathize with the attitude of Mr. Fish, a patent attorney of Boston, who decries the Thayer and Lenroot bills as "the most vicious attack that ever has

<sup>1</sup> Called Lenroot bill in the House, LaFollette bill in the Senate.

been made . . . . upon the whole patent system of the United States." His argument reads like a forecast of the Dick decision. It is as strictly legal and as strictly logical as that of the court. But like the latter it does not satisfy. We need a reform of patent legislation. An argument based upon a glorification of the present system and the assertion that the bills under consideration attack that system is hardly likely to raise up many foes to the bills in question. The same may be said of the argument of Mr. Littlefield. It should none the less be added that it is difficult to answer the counsels' argument that many transactions of an entirely innocent character would be brought within the purview of illegality, if the proposed legislation should be enacted. There is much weighty evidence against the bills as well as for them.

W. S. STEVENS.

A most serviceable compilation is *Federal Anti-Trust Decisions, 1890-1911*, a reprint and continuation of the compilation made by Finch in 1907. The work is published in four volumes, and contains cases passed upon in the United States courts arising out of the Sherman Anti-trust Act of 1890. The digest appears at the end of volume 4. (Washington, Department of Justice, pp. 1042, 1036, 984, 699.)

The Interstate Commerce Commission has published a pamphlet containing *National Car Demurrage Rules and Explanations* (Washington, June, 1912, pp. 11). The commission tentatively adopts the rules adopted by the American Railway Association.

The function of the Commerce Court is discussed in a lecture, *Commerce, the Commission and the Courts*, delivered at Cornell University, May 13, by Mr. Logan G. McPherson.

*Hearings before the House Committee on Patents on the Oldfield Revision and Codification of the Patent Statutes*, held April 17-May 25, 1912, have been printed in twenty-seven parts. Part 18 contains the testimony of Mr. Louis Brandeis in which the relation of a patent policy to monopoly prices receives especial attention. The testimony of Mr. Frederick P. Fish, in Part 26, also deals with this question.

*The Twenty-Seventh Annual Report of the Board of Gas and Electric Light Commissioners of Massachusetts for 1911* (Boston, 1912, pp. 239, 441) refers to the need of further legislation in regard to companies which furnish electricity for power purposes. It seems desirable that public supervision and regulation should be made applicable in a uniform way to all companies engaged in the supply of electricity.

The *Reports of Public Service Commission, Second District of New York, from June 2, 1909 to June 30, 1911*, have been published in a separate volume (Albany, 1911, Vol. 2, pp. 778).

The *Second Annual Report of the Board of Public Utility Commissioners of New Jersey for the Year 1911* (Trenton, 1912, pp. 497) contains the second annual report of this commission and copies of decisions rendered during the year.

In the *Report of the Pennsylvania State Railroad Commission* (Harrisburg, 1911, pp. 180) special attention is given to the subject of telephone rates. The commission has come to the conclusion that the only practicable way of determining the reasonableness of local rates is to base them on the unit or local exchange basis. The more important telephone companies of Pennsylvania are cooperating toward this end. The commission therefore believes that the fixing of telephone rates by legislative enactment is not, at present, at least, feasible. The commission also recommends that express companies should be governed in their charges by the long and short haul provision applied to railway companies.

The *Forty-First Annual Report of the Railroad and Warehouse Commission of Illinois* (Springfield, 1912, pp. xvi, 953) gives evidences of the increased responsibilities and powers of the commission.

The *Corporation Laws of Missouri* have been reprinted in separate form (Jefferson City, pp. 241). These contain the revised statutes of 1909 and the amendatory acts of 1911.

The Bureau of Railway Economics (Washington, D. C.) has prepared an elaborate bibliography on *Railway Economics: A Collective Catalogue of Books in Fourteen American Libraries*. The libraries thus used are those of the Bureau of Railway Economics, Interstate Commerce Commission, Congress, John Crerar, New York Public, and Columbia, Leland Stanford, Jr., Harvard, Chicago, Illinois, Michigan, Pennsylvania, Wisconsin and Yale universities. The titles are arranged topically, and there is a twenty-five page index of authors. (Chicago, University of Chicago Press, 1912, pp. x, 446.)

In the *Report of the President of the United Shoe Machinery Company*, for 1912, it is stated that pending litigation initiated by the government has reduced its operating force by a thousand employees. Conditions in regard to the new contracts are explained.

## Labor

Editor of THE AMERICAN ECONOMIC REVIEW:

In its very admirable report (noted in the REVIEW, March 1912, p. 31, and June 1912, p. 485), the Massachusetts Minimum Wage Commission points out that the lowest wages paid to women are confined to certain factories, and that the differences in kind and grade of product cannot account for the wage differences discovered, as both the higher and the lower wages were paid in factories manufacturing the cheaper lines. The commission then concludes that such evidence shows an ability to pay higher wages than some employers pay. "These latter because of inefficient management or because they are making unusual profits, are doing business at the expense of their employees." I do not doubt that such may be and probably is sometimes the case, but is it not possible and even probable that in some cases, at least, the lower wages are paid to inferior workers? At any rate it seems that the proving away of this possibility is an essential part of the argument leading to the commission's conclusion.

RAYMOND V. PHELAN.

*University of Minnesota.*

The Committee on Naval Affairs of the House of Representatives has printed (1) *Report of Civilian Expert Board on Industrial Management of United States Navy Yard*; (2) *Report of Freeland Board on Modern Navy-Yard Methods*; (3) *Report on the Fickers System of Industrial Management* (Washington, 1912, pp. 109). The evidence bears on the question of financial economy as well as labor efficiency.

Additional data in regard to the conditions of governmental work will be found in Volume 3 of *Hearings before the Special Committee to Investigate the Taylor and Other Systems of Shop Management* (Washington, 1912, pp. 1265-1935). There is a large amount of evidence in regard to the bonus and premium systems and other forms of so-called efficiency work.

The *Hearings before the Committee on Interstate and Foreign Commerce to Amend the Erdman Act*, March 25, 1912, has been printed (Washington, pp. 13). The argument for the most part applied to extending the act to disputes in the coal mining industry.

In the *Eighteenth Annual Report of Factory Inspection of Rhode Island* for 1911 (Providence, 1912, pp. 215) it appears that there is a further decrease in the employment of children. The percentage of

children employed in industrial establishments in 1911 was 3.5 as compared with 6.4 in 1900.

Further light on industrial conditions in a New England factory town is disclosed in hearings before the Committee on Rules of the House of Representatives on *The Strike at Lawrence, Mass.*, March 2-7, 1912 (H. Doc. No. 671, 62 Cong., 2 Sess., pp. 464).

In the *Twentieth Annual Report of the Bureau of Statistics and Information of Maryland* for 1911 (100 Equitable Bldg., Baltimore, 1912, pp. 368) the commissioner advises that the limit of age for children to work be raised from 12 to 14 years.

In the *Fourth Annual Report of the Factories Inspector of the Province of Nova Scotia* for 1911 (Halifax, 1912, pp. 61) there is a paragraph in regard to the "safety man" as a factor in preventing accidents in industrial establishments. The experience of the United States, particularly the state of Indiana, is cited, showing the value of such an official. This report also contains in an appendix a report of a special inquiry into 100 accidents at the Dominion Iron and Steel Company of Sydney.

The value of a safety man or a safety committee is also referred to in *Accident Bulletin No. 4* of the Bureau of Labor, Industries, and Commerce of Minnesota (March, 1912, pp. 8). Special reference is made to the experience of the Illinois Steel Company and the Chicago and Northwestern Railway Company.

The *Labor Laws of Missouri* in force September, 1911, have been compiled in a separate volume (Jefferson City, State Labor Bureau, 1912, pp. 72).

A similar compilation has been made in *Labor Laws of the State of Washington* (Olympia, Bureau of Labor, 1911, pp. 104).

The *Report on Trade Unions in 1908-1910 with Comparative Statistics for 1901-1910* published by the British Board of Trade (London, Wyman and Sons, 1912, pp. cii, 143) devotes especial attention to the benefit expenditures of labor unions. Rules respecting the weekly amounts of such benefits and number of weeks for which the benefits are paid are summarized. The last report previously published in this series dealt with the period 1905-1907.

Among the new features which appear in the *Fifteenth Abstract of Labour Statistics of the United Kingdom* (London, Board of Trade, 1912, pp. xxiii, 345) are: minimum time-rates of wages fixed by trade boards, trade-union benefits, and data in regard to old-age pensions.

The *Twelfth Report of the Bureau of Labour of the Province of Ontario, for 1911* (Toronto, 1912, pp. 302), contains considerable information in regard to the benefit features of labor organizations (pp. 91-161, 260-261).

The *Daily Consular and Trade Report* for July 6, 1912, contains a memorandum of the award of a minimum wage for the coal miners of West Riding, Yorkshire, under the Coal Mines Minimum Wage Act of 1912.

The *Thirty-fourth Annual Report of the Bureau of Statistics of Labor and Industries of New Jersey for 1911* (Trenton, 1912, pp. xiii, 308), continues the useful tables prepared by this bureau, classifying weekly earnings (pp. 28, 77-102). The report also includes a seventy-five page report on industrial insurance in Germany.

#### Money, Prices, Credit, and Banking

PRICES. The Canadian Department of Labour has issued its second annual report on *Wholesale Prices, Canada, 1911* (Ottawa, 1912, pp. xiii, 223). Previous reports (considered in the REVIEW for March, 1911 and December, 1911) presented wholesale price statistics and index numbers for the period 1890-1910. The present report contains appendices on the gold output, 1911, and retail prices, 1910-1911.

During 1911, wholesale prices in Canada reached a higher general level than in any year during 1890-1910, and probably higher than in any year since 1872-73. The general index was 127.2 for 1911 as compared with 124.0 for 1910. From January to June the monthly indices ranged between 126.1 and 126.4; during the remainder of the year there was a precipitous rise to 129.4 in December. The rise was due primarily to great advances in the prices of grains, fruits, and vegetables. Raw materials advanced 7.2 points over 1910 while manufactured articles advanced 1.8 points. The weighted index number rose from 128.0 in 1910 to 131.1 in 1911, being, therefore, in close agreement with the unweighted numbers previously quoted.

In the United States the Labor Bureau index number for 1911 was 129.3 as compared with 131.6 for 1910. In Great Britain the Board of Trade index number for 1911 was 109.3, being 0.6 per cent higher than in 1910, 5.1 per cent higher than in 1909, and the highest recorded since 1884.

WARREN M. PERSONS.

Relating to the question of investigating a "Money Trust" are to

be noted *Hearings on House Resolution No. 314*, December 15, 1911 (pp. 51), January 26, 1912 (No. 1, pp. 44; No. 2, pp. 58); also speech of Hon. Robert L. Henry, February 24, 1912 (pp. 15).

A circular of the National City Bank of New York for May, 1912, contains an interesting page in regard to the proposed changes in the design and size of paper currency. The June issue summarizes recent progress toward a national budget, and also gives a paragraph to the improvement in national bank supervision during the past three years.

In the *Annual Report of the Superintendent of Banks of New York for 1911* (Albany, pp. 680) it is noted that the postal savings banks have not disturbed the steady growth of corporate savings banks. The gain in open accounts was greater in 1911 than in 1910.

The *Annual Report of the Commissioner of Banking and Insurance Relative to Building and Loan Associations* in New Jersey for 1911 (Trenton, 1911, pp. 594) notes continued growth and prosperity of building associations. Gross assets increased over 11 per cent during the year.

The *Laws Relating to Banks, Savings Banks and Trust Companies of Connecticut 1911*, have been published in pamphlet form (Hartford, pp. 58).

The *Banking Laws of Missouri* have also been reprinted in a separate pamphlet (Jefferson City, 1911, pp. 156, xii), with annotations of judicial decisions.

The Auditor of Public Accounts of Illinois has issued a small pamphlet containing the *Laws of Illinois Governing Corporations with Banking Powers and Trust Companies, 1912* (Springfield, pp. 15).

The *Twentieth Annual Report of the State Banking Board of Nebraska* (Lincoln, 1912, pp. xxxiv, 369) contains data in regard to the new depositors' guaranty fund which was established last year. There is also appended the state banking law now in force.

The New Zealand Department of Labour has published *Inquiry into the Cost of Living in New Zealand 1910-11* (Wellington, 1912, pp. 29). The report is based on returns made by householders, representing, on the whole, thrifty and careful citizens. Practically the inquiry is similar in form to that recently made in Australia noted in the REVIEW for June, 1912, (p. 448) and comparisons are made with the results there obtained.



Fabian Tract No. 162, *Family Life on a Pound a Week*, by Mrs. Pember Reeves, deals with workmen's budgets in the district of Lambeth, London.

### Public Finance

TAXATION IN OHIO. *The Second Annual Report of the Tax Commission of Ohio* (Springfield, 1912, pp. 468) is the first report of the Tax Commission of Ohio to cover a full year. Passing over the excellent work done in connection with taxes upon corporations this review must confine itself to the equalization of real property values in 1911 and to the commission's views on tax reform.

The equalization of real property values was doubtless much better done than ever before in Ohio. The former decennial board of equalization was strictly an equalizing board, but the law now lays down "true value in money" as the rule of equalization and permits the commission to increase the valuation of any district or of any class of real property. The commission thus becomes an assessing board. The plan followed was that of average values per acre, making use of the original appraisements, considerations in transfers, tax maps and conferences with assessing officials and others. The commission rejected the so-called sales method on the grounds of impracticability and expense. Its objections to the theory of this method are not conclusive, namely, that sales do not determine values and that the assessor does not uniformly assess all property (p. 68).

The commission holds that the taxation of all kinds of property "by a uniform rule according to its true value in money" is the only just and equitable rule of property taxation (p. 35). It condemns the exemption of the public bonds of Ohio on the uncertain ground that interest has not been saved, overlooking the fact that the tax was inoperative (p. 4). It entertains the purely legalistic notion that "shares of stock constitute property distinct from the capital or property of the company," and on that ground condemns the exemption of the shares of stock of domestic corporations and of foreign corporations two thirds of whose property is taxed within the state.<sup>1</sup>

Such views naturally breed impatience of proposals to change the nature of the tax. Classification is characterized as "an ingenious device for shifting the burden of taxes to the shoulders of those least able to bear it." More assent will be given to the proposition that if

<sup>1</sup> It may be noted that former Attorney-General Wade H. Ellis also questioned the constitutionality of this legislation. See *Report of the Tax Commission, 1908*, p. 13.

the general property tax is necessarily a failure, the only logical thing to do is to exempt all personal property (p. 34).

But the commission is alive to the necessity of changes in the administrative machinery of the tax. This reform was inaugurated with the creation of the Tax Commission. In the view of the commission, a second and very necessary step was taken in limiting the tax rate.<sup>2</sup> The commission here seems to fall into the fundamental error of many advocates of classification, believing that a low rate will make owners "ashamed not to return their property for taxation" (p. 32). To supplement this legislation, the commission recommends the abolition of the state levy, which is to be achieved through leaving the support of the common schools to the counties and, in the unlikely (?) event that present revenues should be unable to provide for the sinking and university funds, through apportionment among the counties on the basis of total revenues raised. The creation of the office of county assessor, and constitutional amendments making clear the power of the state to levy taxes on incomes, inheritances, and the production of minerals, and to exempt timbered tracts, conclude the important recommendations made (pp. 40, 41).

In passing judgment on the commission's attitude on tax reform, it should be borne in mind that it appears to be registering the voice of the people of Ohio, who have, through their Fourth Constitutional Convention, just reaffirmed and revamped the uniform rule of taxation in accord with the views of the commission. The vexing problem of how to reach and tax intangible forms of property has received little consideration. Opposition in the convention to genuine tax reform found its life not so much in the merits of the question as in the fear of the single tax (which element was in control of most of the convention machinery) and in the even greater fear of the farmer vote in the approaching primaries.

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*Hearings and Statements Submitted to the Senate Committee on Finance (H. R. 21213) relating to Schedule E Duties on Sugar, Molasses, Syrups, etc.* has been issued (Washington, 1912, pp. xxvi, 901). The volume contains Senate Report No. 763 and a comparison of the

<sup>2</sup>This interesting legislation is described in the *AMERICAN ECONOMIC REVIEW* for September, 1911, pages 648-9, and also in the volume under review, pages 29-32.

laws enacted from 1883 to 1900 and tables of imports from 1894 to 1911. The Senate report is adverse to placing sugar on the free list. The hearings took place in April, 1912, and represented the testimony of some thirty witnesses. There are many statistical tables showing the progress of the beet sugar industry.

The report of the Committee on Ways and Means on *Reduction of the Duties on Cotton Manufactures* (H. R. No. 829, 62 Cong., 2 Sess., June 4, 1912, pp. 53) contains an analysis of the report of the Tariff Board. The majority report argues that the duties fixed in the bill of 1911 are fully justified by the findings of the Tariff Board. It is also claimed that the board has prepared its report upon a basis different from that employed in the wool report, placing more reliance upon foreign prices, rather than upon costs.

The minority report of the House Committee on Ways and Means (Report 461, Part 2, 62 Cong., 2 Sess., March 14, 1912., pp. 8), adverse to an excise tax on incomes, claims that the proposed measure would not yield over \$20,000,000. An analysis is made of available statistical data in the light of English experience with the income tax.

The report of the Senate Finance Committee on *Duties on Metals and Manufactures of Metals* has appeared (591, 62 Cong., 2 Sess., Apr. 5, 12, 1912, pp. 6, 24). The report adds nothing to the House report noted in the June issue.

Mr. Truman G. Palmer has boiled down the arguments against proposed preferred reductions of sugar duties in two pamphlets, *Sugar-Tariff Reduction: Who Wants It and Why*, and *Competition v. Monopoly*, which have been published as two Senate documents, Nos. 378 and 377 (62 Cong., 2 Sess.). The first is a digest of testimony presented before the Hardwick Committee (pp. 23); and the latter summarizes and answers twenty-four arguments advanced by the New York refiners in favor of free sugar (pp. 17).

*Circular 525* of the New York Tax Reform Association (29 Broadway, New York) contains a summary of the tax legislation at the recent short session of the legislature. The principal changes in the law were the exemption of household furniture and personal effects to the value of one thousand dollars and the reduction of taxation upon forest lands. Certain administrative changes were introduced in the method of computing the tax rate in the city of New York.

Attention should be directed to the valuable statistical data contained

in the *Report of Commissioners of Taxes and Assessments of the City of New York for the Year Ending September 30, 1911* (New York, 1911, pp. 87).

The Michigan State Library has published *The History of Railroad Taxation in Michigan*, originally submitted as a doctoral thesis at the University of Michigan, by Professor Wilbur O. Hedrick (Lansing, 1912, pp. 69). Successive chapters discuss the capitalization tax, the tax on gross income, and the property tax.

The Wisconsin Income Tax Law of 1911 has been published as a separate, with explanatory notes distributed under the different sections. (Madison State Tax Commission, 1911, pp. 68.)

The *Report of the State Tax Commission* of Alabama, for 1911 (Montgomery, pp. 75), affords evidence of the influence of a state board in increasing assessments. Although assessment has been reduced from 100 to a 60 per cent basis, the total valuation has been increased. In the five years' existence of the commission, taxable values have increased 46 per cent. Nearly all of the report is devoted to tables.

Of interest in *Proceedings of the Third Biennial Conference Convention of the Tax Commission and the County Assessors of Kansas* (Topeka, 1912, pp. 121) is the account of the pioneer efforts being made in Kansas in the classification of real estate for purposes of assessment. The report is chiefly concerned with answers to questions as to assessments.

The State Board of Equalization of California has published in convenient form *Revenue Laws of the State of California*, including citations from court decisions affecting such laws (Sacramento, 1912, pp. 510).

The State Board of Equalization of California has published a *Special Report on Taxation showing First Effects of Separation on State, County and Municipal Revenues and Tax Rates* (Sacramento, December 1, 1911, pp. 28), covering the experience of the first year of the new system.

There has also been received a bulletin of the State Board of Equalization containing *Proceedings of the Tenth Annual Convention of County Assessors' Association of California* (Sacramento, 1912, pp. 40), containing various papers on home rule in taxation, the new tax law and the taxation of mining property.

The *Seventh Annual Report of the Collector of Internal Revenue of the Philippine Islands*, for 1911 (Manila, pp. 51), deals not only with the taxes of the insular government but also with the local taxes of Manila.

The rapidly increasing trade of the United States with Bolivia has led the Pan American Union to publish a revised edition of the *Bolivian Tariff and Appraisalment Schedules* (Washington, 1912, pp. 157).

The report on *Economy and Efficiency in the Government Service* has been published in bound form (H. Doc. No. 670, 62 Cong., 2 Sess., 1912, pp. 565). It contains the message of President Taft, April 4, 1912, and, in the appendices among others, reports on the methods of appointment, consolidation of certain bureaus, accounting offices of the Treasury, and travel expenditures.

#### Insurance and Pensions

THE ADMINISTRATION OF THE OHIO COMPENSATION LAW. The commission of three appointed to administer this law secured a favorable decision from the Ohio Supreme Court before attempting to place the law in operation. This commission is composed of a representative of labor, of the employing class, and of the legal profession. Their salaries, as well as all costs of administering the law, are paid from the general revenue of the state, not from the assessments collected from employers and employees. The data upon which rates for particular industries are based are incomplete, and the commission, recognizing this fact, promulgated the rates for a period of six months. There is a maximum and minimum rate for each industry and if, at the close of the above period, experience as a whole or of a particular plant indicates that the rate is too low or too high, changes are to be made. The rate is specifically based on the one hundred dollar pay roll. The difference between maximum and minimum is in some cases very great.

Owing to the detailed and complex nature of the law and to the activity of representatives of private liability companies, the commission sent representatives to various places in the state to explain the law, and is now publishing a journal for the purpose of informing the public in regard to the provisions of the law. The commission claims that private companies have misrepresented these provisions, and it has recently secured an opinion from the Attorney-General through the State Superintendent of Insurance that "no insurance company can

contract to indemnify an employer from the result of injuries occasioned by the wilful act or his failure to observe the laws of the state." This represents a decided victory for the commission.

An increasing number of firms are availing themselves of the law, although as yet by far the larger number have not elected to come under it. In such case they are deprived of common law defenses. The commission reports that a number of firms desire to take advantage of the law, but, because their particular rates would be very high, they plan first to improve their plants. The rates are in many cases much higher than those of private companies but the protection, especially to the workman, is much greater. Medical examiners have been appointed for various sections of the state and there are also a number of traveling auditors who will be withdrawn from the field as soon as the public has been informed regarding the law and especially regarding the rates.

A series of blanks is furnished upon which to report injuries, and every facility is provided to make it possible for both employer and employee to take advantage of the law. In its administration two points are especially kept in mind: (1) to give every inducement to the employer to improve his plant by means of the maximum and minimum rates; (2) to reduce expenses and make the charges approach first cost. The fund is a general one; there is not, as in the case of Washington, a particular fund for each industry. Somewhat wide latitude has been given the commission as to methods of procedure and the granting of awards. The administration of the law so far seems to have warranted this grant of discretion.

W. F. GEPHART.

*The Proceedings of the National Convention of Insurance Commissioners, Forty-Second Session, 1911*, have been printed in two volumes (Harry R. Cunningham, secretary, Helena, Montana, 1911, pp. 205, 549). The first volume contains a verbatim report of the proceedings, and the second the report of the examination of various accident insurance companies.

Massachusetts has appointed a commission to study the question of the support of dependent minor children of widowed mothers. Legislation, providing what have been called widow's pensions, has already been enacted in Illinois and Missouri and is being agitated in various other states. An interesting session of the National Conference of Charities and Corrections, last June, was devoted to the

subject. In Massachusetts eight bills providing for pensions were presented to the last legislature. The commission appointed consists of Dr. Robert F. Foerster, of Harvard University, chairman, Mrs. Clara Cahill Park, and Mr. David F. Tilley. It is attempting by special investigation and by hearings to learn the adequacy of existing measures and the possible advantages of state grants to widows. Its report will be made to the legislature in January, 1913. R. F. F.

The Insurance Department of New York has issued a *Report on Examination of the Automobile Underwriters Conference*, held Dec. 30, 1911 (Albany, 1912, pp. 28), in which a brief history of automobile insurance may be found. Rates are given for different hazards. In 1910 insurance as reported by 23 companies amounted to \$203,000,000, for which premiums of \$4,400,000 were paid. The losses were a little over \$2,000,000.

In a pamphlet, *Compensation Insurance for Employers*, the Massachusetts Employees Insurance Association (28 State St., Boston, 1912) explains the relations of this association to the new workmen's compensation law recently enacted in Massachusetts, discusses the probable cost of insurance by the state association, and replies to criticisms which have been made by representatives of private liability companies.

Part IV of the *Report of the Department of Trade and Commerce*, Canada, for 1911, contains a description of the various forms of government annuities, showing the cost at different ages. (Ottawa, 1912, pp. 112.)

### Demography

The Ministry of Trade and Commerce of Canada has issued with commendable promptness the first volume of the *Fifth Census of Canada, 1911* (Ottawa, 1912, pp. x, 623), devoted to statistics of area and population. The returns are for June, 1911. It is hoped that the volume on agriculture and manufactures will be published before the end of the current fiscal year.

From the *Nineteenth Annual Report on Births, Marriages, Divorces and Deaths in Maine, 1910* (Augusta, 1911, pp. 192) it appears that the number of births was 266 less than in 1909 while the number of deaths was 1144 more. The number of marriages was also less.



## PERIODICALS

The REVIEW is indebted to Robert F. Foerster for abstracts of articles in Italian periodicals, and to R. S. Saby for abstracts of articles in Danish and Swedish periodicals.

### Theory

(Abstracts by W. M. Adriance)

ALLIX, E. *La méthode et la conception de l'économie politique dans l'oeuvre de J. B. Say*. Rev. d'Hist. Doc. Econ., 4, 1911. Pp. 40.

Part of a forthcoming book, *J. B. Say et la formation de la doctrine économique libérale en France*. A painstaking study of the method and views of Say, and his place in the history of economic thought.

CARLTON, F. T. *Price and rent*. Quart. Journ. Econ., May, 1912. Pp. 4.

The presence or absence of physical deterioration is the distinguishing feature between interest and rent.

CLEMENT, H. *La méthode de Karl Marx*. Réf. Soc., Apr. 16, May 1, 1912. Pp. 24.

Rather a general indictment of socialism than a serious discussion of the method of Karl Marx. A good example of the wrong sort of criticism of socialism.

CONRAD, J. *Böhm-Bawerks Kritik der sozialistischen Zinstheorie*. Zeitschr. f. Volkswirtsch., XX, 4, 1911. Pp. 30.

Böhm-Bawerk opens the pages of the *Zeitschrift* for the expression of views directly antithetical to his own. Conrad, to be sure, accepts Böhm-Bawerk's theory of interest, but aims to re-establish the contention that rent and interest are exploitation. He holds that labor alone is "productive." Land and capital—as a part of "nature" simply furnish objectively the field for man's activity. The argument is so clearly stated, that its readers will be anxious to see the reply which Böhm-Bawerk apparently contemplates making.

FEILBOGEN. *L'école autrichienne d'économie politique*. Journ. des Econ., Apr. & May, 1912. Pp. 25.

A continuation. Deals with Wieser's work.

GUYOT, Y. M. G. *de Molinari*. Journ. des Econ., Feb. 15, 1912. Pp. 19.

A brief account of Molinari's life with an appreciation of his work and a summary of his economic theories.

HANEY, L. H. *Everyday economic errors*. Univ. of Texas Bull., Apr. 22, 1912. Pp. 21.

In very short compass Professor Haney refutes current fallacies on the "balance of trade," "overproduction," the "go easy" policy of workmen, waste and luxury, rents determining prices, the function of middlemen and speculators, farmers' profits, "natural price," etc.

OSWALT, H. *Eine neue Begründung der Arbeitskostentheorie*. Zeitschr. f. Socialwis., Mar., 1912. Pp. 4.

A review of Conrad's article, an abstract of which is given above. Conrad's views are hardly given the respectful consideration they deserve.

SPEDDEN, E. R. *Is the study of economics useful for the engineer?* Sib. Journ. of Engg., Apr., 1912.

Gives an affirmative answer.

### Economic History

(Abstracts by Clive Day)

ADAMS, C. C. *Foundations of economic progress in tropical Africa.* Bull. Amer. Geog. Soc., Oct., 1911. Pp. 13.

ALCORTA, Q. *Aperçu sur la situation économique de la République Argentine.* Rev. Econ. de Bordeaux, Mar.-Apr., 1912. Pp. 16.

Statistical survey.

BERUSKY, H. *Einiges über das Erbrecht der Naturvölker. III.* Zeitschr. f. Socialw., Dec., 1911. Pp. 13.

An ethnographic study based on a wide range of material.

BOND, B. W. *The quit-rent system in the American colonies.* Am. Hist. Rev., Apr., 1912. Pp. 20.

A substantial contribution on an important feature of colonial land tenure.

BURPEE, L. J. *A chapter in the literature of the fur trade.* Papers of the Bibliographical Society of America, Vol. V, 1910.

CLARKE, M. P. *The Board of Trade at work.* Am. Hist. Rev., Oct., 1911.

Study of organization and procedure of the most important organ of colonial administration in the eighteenth century.

DEICHMAN, C. F. *Great industrial development of Kyushu, Japan.* Far East Rev., Feb., 1912.

DEPITRE, E. *La prohibition du commerce et de l'industrie des toiles peintes aux XVII<sup>e</sup> et XVIII<sup>e</sup> siècles.* Rev. d'Hist. Doc. Econ., No. 4, 1911. Pp. 20.

A scholarly and important contribution to French economic history.

DOUGLAS, J. *The industrial progress of the United States of America.* Journ. Soc. of Arts, Nov. 24, 1911.

Interesting review of the influences that have caused the rapid development, the important legislation, etc. Also discussion.

GARVIE, A. E. *Contemporary social developments in Canada.* Sociol. Rev., Jan., 1912. Pp. 15.

General survey followed by discussion of land laws, treatment of Orientals, relations to United States and United Kingdom.

GRETTON, R. H. *Lot-meadow customs at Yarnton, Oxon.* Econ. Journ., Mar., 1912. Pp. 9.

A description of a system of allotment, still practiced in some Thames meadows, and suggestive speculations on its early history.

HAYEM, J. *Mémoires et documents pour servir à l'histoire du commerce et de l'industrie en France. Les inspecteurs des manufactures.* Rev. Intern. du Com., Mar. 31, 1912. Pp. 26.

A useful study, based largely on unprinted material, of a characteristic office of the old régime, from its establishment by Colbert to its abolition during the French Revolution.

ISNARD, E. *L'industrie de la soie en Provence au XVIII<sup>e</sup> siècle.* Rev. Intern. de Sociol., No. 1, 1911.

LEROY-BEAULIEU, P. *Le mouvement des successions en France depuis le commencement du siècle.* L'Econ. Franç., Feb. 3, 1912. Pp. 2.

The estates of decedents, appraised for taxation in France, have shown a tendency to decline rather than to increase in annual value, since 1900. The author discusses possible explanations—decrease in mortality crises, rise in rate of interest, evasion of the inheritance tax; and fixes the chief responsibility on the last named.

MARTIN, G. *La Fronde et les rentiers.* C.R. Acad. des Sciences Morales, Sept.-Oct., 1911. Pp. 27.

MAUNIER, R. *Les idées politiques et économiques d'un cultivateur en l'an V.* Rev. Hist. de la Révolution Franç., Oct.-Dec., 1911. Pp. 14.

Analysis of Loval's *Du Contrat Social*.

DE MOKEEVSKY, A. *La réforme agraire en Russie.* Rev. d. Deux-Mondes, Jan. 16, 1912.

MOORE, S. C. *The industrial evolution of a manufacturing village.* Econ. Journ., Dec., 1911. Pp. 11.

Interesting study of the development of fustian manufacture, since the eighteenth century, at Hebden Bridge in Yorkshire.

NITTI, F. *Some demographic and economic information on Italy in the last fifty years.* Bull. Bur. Econ. & Social Intelligence, Feb., 1912. Pp. 8.

An address by the Italian minister of agriculture, chiefly statistical.

NOYES, A. D. *Politics and prosperity.* Atlantic, Feb., 1912. Pp. 12.

PALMIERI, P. A. *La Finlandia agricola e commerciale.* Riv. Intern., Feb., 1912.

Review of the economic progress of Finland during half a century.

PEREZ, L. M. *Labor bibliografica.* Revista Bimestre Cubana, May-June, et seq., 1911.

Many titles of interest to economics are included in this list of works printed in Cuba, or elsewhere with reference to Cuba, for the period 1800-1825. The bibliography runs through several numbers of the "Revista."

PHILLIPS, M. *The South Sea bubble.* Journ. Inst. Bankers, Mar., 1912. Pp. 25.

Contains reproductions of South Sea playing cards and of the Bubbler's Mirrour; a contemporary broadside.

- PLATON, G. *Les banquiers dans la législation de Justinien*. Nouvelle Rev. Hist. de Droit, Mar.-Apr., 1911.
- POHLE, L. *Das Wirtschaftsjahr 1911 und die wirtschaftlichen Aussichten*. Zeitschr. f. Socialwis., Feb., 1912. Pp. 13.
- QUESSETTE, F. *L'administration financière des Etats de Bretagne de 1689 à 1715*. Annales de Bretagne, Apr., 1911. Pp. 23.
- RADCLIFFE, W. L. *The early development of the linen trade in Ulster*. Clare Market Rev., Nov., 1911.
- STOWESAND, W. *Die wirtschaftliche Gesetzgebung der deutschen Bundesstaaten im Jahre 1910*. Jahrb. f. Nat. Oek., Aug., 1911.
- WHELFLEY, J. D. *Italy's economic outlook*. Century, Apr., 1912. Pp. 22.
- WILSON, B. *The economic legislation of 1911*. Econ. Journ., Mar., 1912. Pp. 11.

Summary of the Acts of Parliament, excluding the National Insurance Act.

### Economic Geography

(Abstracts by E. V. D. Robinson)

- ADIGARD, P. *Une nouvelle richesse nationale: le fer dans l'ouest de la France*. Réf. Soc., May, 1912.

Iron deposits were worked in west of France in ancient and mediæval times, and even after the Revolution, but their location and even existence were forgotten till 1898. The present output in Normandy is rapidly increasing. There are also deposits in Brittany and Anjou. Part of the output goes to the furnaces in the north of France, part is exported in return for English and German coal. Wages in those districts have already risen, foreign workmen have come in, and a typical industrial revolution is in progress.

- BARR, G. W. *Harnessing the Mississippi to electric generators*. Rev. Rev., Apr., 1912.

The Keokuk dam will make possible 300,000 h. p.—over half of all now developed on both sides at Niagara. It will also provide deep water navigation over the Des Moines rapids. Next to Panama it is the greatest engineering feat of the age.

- BRASHEARS, W. F. *Illinois' water-power water-way*. Public Service, Apr., 1912.

The proposed bond issue is "a twenty-million-dollar plum, dangling tantalizingly before the glistening eyes and watering mouths of the Illinois politicians." The water power feature of it is not practical in either an engineering or a financial sense.

- BROOKS, B. *Water and power in industry—The power planters*. Scribner, May, 1912.

A popular article, well written and well illustrated, on the construction of hydro-electric plants.

- GILLETTE, H. P. *The appraisal of water rights*. Engg. & Con., April 17, 1912.

Larger "multiplier" usually necessary in case of land for water power purposes than for railways, because no substitute routes possible; though rate per acre may be lower when area involved is larger. Multiplier largest on small watershed near great city. Company is entitled to be recouped for depreciation, whether of pump or watershed.

LAURENT, T. *Le développement économique de la France. L'industrie métallurgique.* Mus. Soc. Mém., Apr., 1912.

A usable sketch of the development of the iron industry in France during the last century, largely statistical in character. The others of the same series treat agriculture and textiles of France.

McCOURT, W. E. *A philosophy of geography.* Pop. Sci. Mo., June, 1912.

Geography is not merely a matter of location but of natural controls of life. Interesting collection of examples showing extent of environmental influences.

McKIBBEN, F. P. *Alaska: A much misunderstood territory.* Engg. Mag., May, 1912.

Coast region has immense undeveloped water power. Greatest need is centralized government by a commission, as in Canal Zone. Best plan for mineral development is a leasing system.

MERRILL, O. C. *Water power development under government control.* Eng. Rec., Apr. 27, 1912.

Regulation of water power companies dates back to 1851 in France and 1878 in this country, but has developed most rapidly in the last ten years. Control is local in some countries, national in others, and varies from fixing conditions of franchise, as in most of the American states, to detailed supervision, as in Italy and Switzerland. The federal government, in this country, limits its action to control of power sites on public domain and the exaction of a reasonable rental.

PAWLOWSKY, A. *Le minerai de fer en Anjou et en Bretagne.* Journ. des Econ., Apr. 15, 1912.

These deposits occupy a series of synclines extending as far south as Nantes and appear to be prolongations of the Norman deposits. The mineral is, however, not usually carbonate, but magnetite or hematite. The principal districts are about Segré and Châteaubriant. These deposits were known in previous centuries but were lost sight of again until after 1870, and remained practically unused till after 1900.

DES ROTOURS, A. and others. *Une nouvelle richesse nationale: le fer dans l'ouest de la France.* Réf. Soc., Apr. 16, 1912.

A discussion of the paper by M. Adigard, devoted chiefly to the question of foreign capital and foreign workmen in the French iron mines.

ROYCE, F. P. *A consideration of the report of commissioner of corporations on water power development in the United States.* Stone & Webster Pub. Serv. Journ., May, 1912.

Concentration of control is due to nature, the large powers being

few and at the same time most economical in operation. Competition is wasteful, while consolidation makes for economy and efficiency.

RUEGG, S. G. *What coöperation is doing for the German beet sugar industry.* Am. Sugar Industry, May, 1912.

Anticipating a surplus of sugar in the world market, all classes in Germany interested in the sugar industry have formed an organization to secure the removal of the consumption tax on sugar and by a great variety of means extend the use of sugar in Germany.

RUSHMORE, D. B. *Water power in industrial life.* Scribner, May, 1912.

A rather disconnected account of notable power plants, with some striking illustrations and maps of long distance transmission systems.

TOBELL, J. *Betrachtungen und Vorschläge zur Wasserrechtsgesetznovelle.* Elektrotech u. Maschinenbau, Mar. 24, 1912.

UNSTEAD, J. F. *The cultivation of wheat in North America.* Geog. Journ., Apr.-May, 1912.

Present limits are economic, but these tend in the long run to approximate the physical limits. Most of article is devoted to extremely careful statistical study of physical limits and their causes. A thorough piece of work of permanent value.

— *The final report of the national waterways commission.* Engg. News. Apr. 25, 1912.

Inland water transportation is decreasing, especially on upper Mississippi. Commission nevertheless recommends the Lake Erie-Ohio River project; also that Interstate Commerce Commission be empowered to compel connection and through rates over joint land and water lines. Discusses thoroughly all aspects of water conservation.

## Railways

(Abstracts by Ernest R. Dewsnup)

ALLEN, W. F. *Railways and nationalization in the United States, apropos of a work by Mr. E. A. Pratt.* Bul. Int. Ry. Cong., Apr., 1912.

BAKER, J. N. *The fourth section, or the long and short haul.* Yale Law Journ., Feb., 1912.

"No rate to an intermediate point can be reasonable so long as the carrier is maintaining at the more distant point a lower rate, except in so far as that lower rate is compelled by causes which the carrier does not control."

BISHOP, A. L. *The Hudson Bay route, a new outlet for Canadian wheat.* Ry. Age Gaz., Apr. 26, 1912. Pp. 2½.

Route will be reasonably safe from July to October. The difficulties in operation of railway from The Pas to Hudson Bay will not be insuperable.

COLSON, C. *Results of operation of the French state railways, 1909 to 1911.* Ry. Age Gaz., May 31, 1912. Pp. 3½.

Abstract of article in *Bulletin of International Railway Association.*

The operating results of 1908, 1909, 1910 are given, showing continued financial deterioration, unrelieved by any improvement in service. The nationalization of the Western system was unwise but improvement of the present condition is to be hoped for from the financial reorganization provided by the Act of 1911.

DELANE, F. A. *What is the matter with the railways?* Ry. Age Gaz., Apr. 19, 1912. Pp. 2.

Need of coöperation between the public and the railways. A profit-sharing arrangement is, perhaps, the only way in which an end can be put to hostile legislation.

DUNN, S. O. *Railway discrimination.* Journ. Pol. Econ., May, 1912. Pp. 23.

Recent instances of unfair discrimination are discussed and the conclusion is arrived at that, to meet such cases as are quoted, the Interstate Commerce Commission should be given power to fix minimum rates.

EMERSON, H. *The efficient manufacture of railway transportation.* Engg. Mag., June, 1912. Pp. 7.

Illustrates varying ideals of public service as manifested in the way in which different corporations treat the public.

LEROY-BEAULIEU, P. *Government railway operation in France.* Ry. Age Gaz., May 10, 1912. Pp. 2.

A translation of the editorial, an abstract of which appeared in the June number of the REVIEW (p. 467).

LEWIS, H. T. *Interest and profits in rate regulation: Practice of the Wisconsin Railroad Commission.* Pol. Sci. Quart., June, 1912. Pp. 21.

An explanation, largely in the words of the commission itself, of the principles upon which its decisions are based in the regulation of the rates of public utilities. Rates of interest and profit are allowed such as would exist, so far as can be ascertained, under similar conditions, competition being present.

RIPLEY, W. Z. *The commodity clause in railroad legislation.* Quart. Journ. Econ., May, 1912. Pp. 5.

Outlines the methods of reorganization of their coal-mining business adopted by the various anthracite roads under the pressure of the "commodity clause."

STOCKBRIDGE, F. P. *The parcels post.* World's Work, June, 1912.

SUFFERN, E. L. *The need of reconciliation between the railways and the public.* Engg. Mag., May, 1912. Pp. 5.

The railways would increase public interest in their financial needs if they would cultivate more effectually the good-will of the public.

SWAYZE, F. J. *The regulation of railway rates under the fourteenth amendment.* Quart. Journ. Econ., May, 1912. Pp. 36.

After explaining the significance of the decisions of the Supreme Court in the Granger and Minnesota rate cases, Judge Swayze examines the Nebraska rate cases and subsequent decisions, pointing out



that no definite rule was laid down regarding valuation, and that the law is still in a formative stage as regards the determination of reasonable value.

— *Effect of regulation in Texas.* Ry. & Engg. Rev., June 1, 1912. P. 1.

An address prepared by the General Managers' Association of Texas. Freight rates in Texas are inadequate. Modification of existing stock and bond law is necessary to secure proper development of the railway system of the state.

— *F. C. Rice and the American Railway Association on accidents.* Ry. Age Gaz., June 7, 1912. Pp. 1½.

Outlines the resolutions concerning railway trespassing and accident prevention passed by the association last May. A vast majority of the accidents that now occur could not be prevented by improvement of physical facilities, the human element being responsible.

— *Increase in fares on Illinois railway.* Elec. Ry. Journ., June 1, 1912. Pp. 2½.

Increase of fares by the Galesburg and Kewanee Electric Railway. The new rates were expected to produce an increase in revenue of 9.1 per cent, but only 4.2 per cent was secured, the number of passengers decreasing 4.1 per cent.

— *Injustice of freight "differentials" exposed.* Greater N. Y., May 27, 1912. P. 1.

Present differential system is urged by counsel, in argument before the Interstate Commerce Commission, to be an arbitrary discrimination against New York.

— *Proposed freight transportation in Chicago.* Elec. Ry. Journ., June 1, 1912. Pp. ½.

Urges the advantage of granting to all the surface and elevated railways of Chicago the power to carry package freight at night.

— *Some results of government railway operation in France.* Ry. & Engg. Rev., June 8, 1912. Pp. 1.

Summary of M. Colson's article, for which see above.

— *The Panama toll question.* Ry. Age Gaz., May 31, 1912. Pp. 1.

The whole Panama Canal problem is being handled in a spirit of sectionalism, prejudice and political opportunism.

— *The tap-line case supplemental report.* Ry. Age Gaz., June 7, 1912. Pp. 2½.

The facts ascertained concerning certain tap-lines indicate that, in many respects, these lines are not observing the regulations of the Interstate Commerce Commission.

## Waterways

(Abstracts by Edwin J. Clapp)

ADAMSON, W. C. *Needed Panama canal legislation.* Independent, Mar. 21, 1912.

An argument against discrimination in Panama canal tolls in favor of American ships, coasting or otherwise. The exclusive right to engage in the coasting trade is already sufficient subsidy to American vessels.

B., L. *Bordeaux-Maritime*. Rev. Econ. Bordeaux, Nov.-Dec., 1911.

A detailed review of the clash of interests and inefficiency of administration which has hindered the authorized modernization of the port of Bordeaux. Present conditions of principal French ports.

LUDINGTON, A. C. *New York water terminals*. Nat. Munic. Rev., Jan., 1912.

An excellent survey of the New York Dock Department's plans to reorganize the Hudson River waterfront.

— *The Chicago river and the Chicago harbor*. Engg. News, Mar. 21, 1912.

Advocates the construction of a harbor outside the city for the transshipment of through freight between rail and lake carriers. This freight is to go around the city on a belt line and not, as at present, contribute to the city's congestion. Local freight is to be landed on the shores of the Calumet and Chicago rivers, as at present, but relief is to be afforded by the construction on the lake shore of two huge city piers, at the mouth of the Chicago river.

— *Debate on Panama canal tolls*. Mo. Bull. N. Y. Chamber of Commerce, Apr., 1912.

The Chamber of Commerce adopted a resolution calling on the President to use all means in his power, consistent with our treaty obligations, to have Panama canal tolls such as to protect American interests and serve the upbuilding of our merchant marine. "We advocate as a measure to this end that the rates of toll on vessels engaged in the coasting trade shall not be over one third the rate charged on vessels engaged in the deep sea business, or free if necessary to accomplish the purpose desired."

— *Domestic commerce should be free*. Greater New York, Mar. 11, 1912.

Advocates a free Panama canal for coasting vessels. The same policy applied to internal improvements should be applied to the canal as used in interstate traffic.

— *Report on Panama canal tolls*. Mo. Bull. N. Y. Chamber of Commerce, Mar., 1912. Pp. 5.

The Chamber's committee on foreign commerce reports in favor of toll of \$1 per ton upon all tonnage passing through the canal.

### Accounting

(Abstracts by John Bauer)

BENTLEY, H. C. *Standardization of accounting forms and methods*. Journ. Account., May, June, 1912.

Articles 3 and 4 of a series. Article 3 discusses the grouping and

arrangement of the items in the balance sheet, also the principles by which the various items should be valued. Article 4 is a discussion of the income statement: takes up the desirable title of the statement, the form and arrangement of items, and the sub-analysis of the statement. A typical balance sheet (in two forms) and a typical income statement (with sub-analysis) are given. Clear and suggestive short articles.

BOSHER, L. H. *Controlling accounts in cost accounting.* Journ. Account., June, 1912. Pp. 15.

In four parts: (1) classification of accounts; (2) collection of cost data; (3) controlling accounts; (4) monthly statements. A rather indefinite and too general discussion.

FEDERAL ECONOMY AND EFFICIENCY COMMISSION. *Report on the accounting offices of the Treasury, with recommendations for the consolidation of the six auditors' offices into one office.* Gov. Account., May, 1912. Pp. 12.

The commission recommends that the present six auditors of the Treasury be replaced by the Auditor of the Treasury, and that all the auditing work of the government be consolidated. Uniformity of records and procedure would be secured, efficiency promoted, and a saving of over \$100,000 annually would be effected.

FRANKLIN, B. A. *Cost methods that give the executive control of his business.* V. *Labor from the cost viewpoint.* Engg. Mag., May, 1912.

The weekly pay-roll should show the total labor cost and an analysis of it. Forms are presented providing ready comparisons from week to week.

FRANKLIN, B. A. *Cost methods that give the executive control of his business.* VI. *The veering question of expense.* Engg. Mag., June, 1912.

Discusses so-called indirect expenses, or over-head charges. Two points are important: (1) determining cost of salable articles; (2) keeping expenses under control. There is no absolute rule for correct apportionment of indirect expenses; the value of any rule adopted must be judged more from the second than the first point.

HEYDON, F. E. *Modern transportation accounting. II. Operating revenue.* Gov. Account., May, 1912. Pp. 6.

Discusses and illustrates the difficulty of determining absolutely what are operating and what are capital costs.

HUMPHREYS, D. G. *The value of buildings and machinery as a lender's security.* Accountant, May 25, 1912.

A suggestive article, written from the standpoint of English experience and law.

JENKINSON, M. W. *The promotion and accounts of a public limited company.* Accountant, June 1, 8, 15, 1912.

Describes procedure in the promotion of a company, and explains the various books of accounts that should be kept—according to English custom and practice.

LEONHAUSER, U. L. *A national fund for promoting efficient municipal accounting and reporting.* Gov. Account., May, 1912. Pp. 4.

Briefly describes the work carried on through the Metz fund establishing scientific and uniform accounting in cities.

LEONHAUSER, U. L. *Municipal accounting: the capital account balance sheet.* Gov. Account., May, 1912. Pp. 9.

Discusses the advantages of subdividing the general balance sheet of a city so as to bring in comparison the permanent properties with the bonded long-time debts.

MITCHELL, T. W. *Relation of cash discounts to goods valuation and to reserves for bad debts.* Journ. Account., May, 1912. Pp. 10.

Cash discounts offered and taken on sales are usually treated as losses to the seller and gains to the purchaser. This is wrong accounting. Discounted cash prices are present values of goods sold; undiscounted prices are future values, and include (1) interest on present values, (2) insurance on bad accounts. Therefore, if cash accounts offered are taken, the seller gets and the purchaser pays what is immediately due, there is neither loss nor gain; but, if the discounts are not taken, then the seller receives and the purchaser pays interest and insurance,—the opposite of the usual treatment. These facts should be shown by the accounts, and the article explains how this can be done. An unusually valuable article.

MOYER, M. S. *The audit of banks of discount and deposit.* (Second article.) Journ. Account., May, 1912. Pp. 5.

PAULA, F. R. M. DE. *A few notes on auditing.* Account., June 15, 1912.

Covers a wide variety of points on accounting, auditing and finance; pays particular attention to the auditing of depreciation.

PRENDERGAST, W. A. *Efficiency through accounting.* Ann. Am. Acad., May, 1912.

Holds that modern accounting cannot produce efficiency in city government, but clears the way for efficiency. Recounts the experience of New York city in getting control of the various classes of expenditures and in establishing standards of results.

TAUSSIG, B. J. *Results obtainable through reorganization of accounting methods (in cities).* Ann. Am. Acad., May, 1912.

Accounts should show revenues and costs, provide for measuring the efficiency of services, and keep control of municipal properties. The article is based upon the experience of St. Louis.

TAYLOR, G. *Municipal accounts.* Accountant, May 11, 1912. Pp. 7.

Show advantages of the "income and expenditures" accounts system over the "receipts and payments" system. Discusses a number of important points on English municipal accounting, both as required by law and as established by practice.

TURNER, E. H. *The repayment of loans of commercial and financial undertakings (sinking funds).* Accountant, Apr. 27, 1912.

Discusses the principles of a sinking fund, the kind of debts for whose extinguishment it should be used, interest rates earned and forms of investment.

WALTON, J. M. *The application to a municipality of modern methods of accounting and reporting.* Ann. Am. Acad., May, 1912.

The author is city controller of Philadelphia, and he describes the reorganization which was recently effected in the accounting methods of that city. Presents consolidated balance sheet of Philadelphia for December 31, 1911.

WRYE, W. C. *Profit and loss—or what?* Journ. Account., May, 1912. Pp. 4.

Suggests "Revenue and Expense" as a title for the statement showing the gains and costs for a given business period. About ten different terms are being used currently to designate this statement.

### Corporations and Trusts

(Abstracts by M. H. Robinson)

ALEXANDER, M. W. *Contribution of industrial combination to national welfare.* Ann. Am. Acad., July, 1912.

Advocates the creation of a "Department of Applied Economics" in every large combination, for the purpose of studying labor conditions and applying proper remedies.

BOLLING, R. C. *United States Steel corporation and labor conditions.* Ann. Am. Acad., July, 1912.

A detailed account of the work of the United States Steel corporation for the welfare of its employees.

BOSTON, C. A. *The spirit behind the Sherman anti-trust law.* Yale Law Journ., Mar., 1912.

CANFIELD, G. F. *Competition, the safeguard and promoter of general welfare.* Ann. Am. Acad., July, 1912.

Shows the wide field of competition still existing.

CLARK, J. B. *The possibility of competition in commerce and industry.* Ann. Am. Acad., July, 1912.

Contends that it is possible so to change our laws that competition may be preserved and its benefits retained without a destructive warfare on trusts.

DAVIS, W. H. *Patents.* Sch. of Mines Qr., Apr., 1912.

DAWSON, M. M. *Publicity of accounts of industrial corporations.* Ann. Am. Acad., July, 1912.

Advocates a bureau at Washington for the purpose of maintaining a department for the filing of corporation reports, with provision for investigation where there is suspicion that false statements have been made.

EVANS, H. *The Standard Oil and American Tobacco cases.* Univ. of Pa. Law Rev., Feb., 1912.

Shows to what extent the scope of the anti-trust law has been extended in the above decisions.

FREUND, E. *The enforcement provisions of the Sherman law.* Journ. Pol. Econ., May, 1912.

FITCH, J. A. *United States Steel corporation and labor.* Ann. Am. Acad., July, 1912.

Based upon the author's personal investigations for the "Pittsburgh Survey." Believes that the United States Steel corporation has not been a good thing for labor and gives his reasons. Also discusses the papers of McCleary, Bolling, and others on labor conditions.

FOOTE, A. R. *Unregulated competition is destructive of national welfare.* Ann. Am. Acad., July, 1912.

Strongly advocates regulation of combinations by the government.

FOULKE, R. R. *Restraints on trade, I, II.* Columbia Law Rev., Feb., Mar., 1912.

Excellent articles, especially strong from the legal point of view. Monopoly is a lawful thing, and the objection to the law is directed against its methods.

GARFIELD, J. R. *Publicity in affairs of industrial combinations.* Ann. Am. Acad., July, 1912.

GWYNN, J. K. *Industrial combines and national progress.* Ann. Am. Acad., July, 1912.

A defense of combinations which is called a "national evolution."

HALL, J. P. *Constitutional aspects of federal regulation of business.* Journ. Pol. Econ., May, 1912.

Through taxation, postal regulations, the interstate commerce clause, and control over interstate corporations, Congress has power to effectively regulate large business enterprises.

KELLOGG, F. B. *Results of the Standard Oil decision.* Rev. Rev., June, 1912.

The courts have accomplished all that could be expected. The prices of the Standard Oil Company stocks have gone up because the suit disclosed an immense surplus. Congress should provide for federal incorporation, compulsory federal licenses.

KING, MONTAGUE, ROESLER, and WALKER. *The policy of Great Britain, Canada, and Germany to industrial combinations.* Ann. Am. Acad., July, 1912.

The Canadian Combines Investigation Act is discussed by Mackenzie King, the British situation by Mr. Montague; and the German attitude toward combinations by Roesler and Walker.

KIRLEY, J. JR. *The benefits of industrial combinations.* Ann. Am. Acad., July, 1912.

Praises industrial and attacks labor combinations.

MONTAGUE, G. H. *The gist of the Supreme Court decision in the Dick Patent Case.* Engg. Mag., May, 1912.

The Supreme Court decision is in accordance with previous decisions.

English and American; it is also, in the writer's opinion, sound from the standpoint of public policy.

MONTAGUE, G. H. *The gist of the proposed patent-law amendments.* Engg. Mag., June, 1912.

Defends the present patent law and argues that proposed amendments providing for "compulsory licenses" and prohibition of "license restrictions" would inevitably retard future progress.

MALTBIE, M. R. *Judicial review of public regulation.* Journ. Pol. Econ., May, 1912.

Judicial review of acts of commissions is apt to be unwise, and if the corporations make appeals to the courts to secure delays, a return may be made to legislative regulation, subject to no such review.

MCCLEARY, J. T. *Big business and labor.* Ann. Am. Acad., July, 1912.

Reviews the progress made in improving conditions and attributes it to big business.

MEADE, E. S. *The fallacy of big business.* Ann. Am. Acad., July, 1912.

The trusts are inefficient, and should be disintegrated. Cut-throat competition would not result, but competition restored would enforce economy and efficiency.

RUSSELL, C. E. *The lumber trust.* World To-day, Apr., 1912.

A continuation of the March article in the same magazine.

SEWALL, E. D. *Actual and constructive patent infringement.* Mach., Apr., 1912.

First of a series of articles.

SHAPIRO, H. *The formation of companies under the English company law: a comparison with American legislation.* Univ. of Pa. Law Rev., Mar., 1912.

SLOSS, R. *The coffee trust.* World's Work, June, 1912.

A careful description of the valorization plan of Herman Sielcken and certain financial interests under his direction.

STEVENS, W. S. *The powder trust, 1872-1912.* Quart. Journ. Econ., May, 1912.

Written from the government record in the suit against the company. The article is strong and illuminating.

TAIT, WICKERSHAM, SMITH, NEWLANDS, BECK, ROBERTS, and WILLIAMS. Ann. Am. Acad., July, 1912.

This series of papers quite generally advocates the control of combinations by a federal commission. Four are in favor of federal incorporation.

TALBERT, SEAGER, NOYES, and MONTAGUE. *The effect of the Sherman anti-trust law on the business of the country.* Ann. Am. Acad., July, 1912.

Destruction of combination by the government is bad policy. Commerce commission is desirable. The patent law defended.

THOMPSON, H. *Big business and the citizen.* I. Rev. Rev., June, 1912.

The article, first of a series, is written to show that monopoly is not a



new thing; that all of the practices of the modern trust are old, but that secrecy is the new sin in business—a claim which may well be doubted.

WILLIAMS, J. *Harmful effects of industrial combinations on labor.* Ann. Am. Acad., July, 1912.

Combinations have made labor more productive, but have retained the added product and used it for dividends. The conditions of labor and the terms of employment are less satisfactory.

WILLIAMS, T. *Competition as a safeguard to national welfare.* Ann. Am. Acad., July, 1912.

Rather general in its nature showing the benefits of rational competition.

WYMAN, B. *Unfair competition by monopolistic corporations.* Ann. Am. Acad., July, 1912.

Advocates an interstate trust commission, similar to the Interstate Commerce Commission, and would give it administrative power over unfair practices, extortionate charges, etc.

WOODMAN, R. S., JR. *Beneficial effects of industrial combinations over labor conditions.* Ann. Am. Acad., July, 1912.

Written from the manager's viewpoint, and claims that conditions have improved under the combinations.

————— *The just value of monopolies, and the regulation of the prices of their products.* Pr. Assoc. of Civ. Engrs., Mar., 1912.

————— *The law of restraint of trade.* Green Bag, May, 1912.

A complimentary review of Mr. R. R. Foulke's articles under the above title in the *Columbia Law Review*, Feb. and Mar., 1912.

### Labor and Labor Organizations

(Abstracts by David A. McCabe)

ANDREWS, J. B. *Protection against occupational diseases.* Pub. Acad. Pol. Sci., II, 2, 1911. Pp. 6.

BARNETT, G. E. *A documentary history of American labor.* Pol. Sci. Quart., June, 1912. Pp. 6.

A review of volumes III to X of *A Documentary History of American Industrial Society*.

BARNETT, G. E. *National and district systems of collective bargaining in the United States.* Quart. Journ. Econ., May, 1912. Pp. 19.

An examination of the history of bargaining between unions and national or district employers' associations from 1898 to date and the conclusions reached as to the conditions under which such systems may be expected to be successfully maintained.

BARRY, R. *Legislating for labor.* Hampton's, Mar., 1912.

BATTEN, S. Z. *Muscantine: the strike problem of a mid-western town*. Survey, June 1, 1912. Pp. 9.

Account of a strike of button makers which has lasted for more than a year. The issue is unionism.

BOGARDUS, E. S. *The relation of fatigue to industrial accidents (concluded)*. Am. Journ. Sociol., Jan., 1912.

Finds that fatigue is a cause of industrial accidents.

BOHLEN, F. H. *A problem in the drafting of workmen's compensation acts*. Harvard Law Rev., Feb., Mar., Apr., 1912. Pp. 21, 27, 31.

An examination of the judicial interpretations of the phrases "personal injury by accident" and "arising out of and in the course of the employment" which occur in a clause of the English Acts of 1897 and 1906 which has been widely copied verbatim.

BOHN, W. E. *The industrial workers of the world*. Survey, May 4, 1912. Pp. 6.

The writer was "identified with the I. W. W. in its initial stages." Sets forth the aims of the Chicago I. W. W. and the relation of this to other groups of industrial revolutionists.

BURNS, A. T. *A promising foundation for industrial peace*. Survey, May 4, 1912. Pp. 5.

Refers to the success achieved under the Erdman Act.

CLARK, L. D. *Review of labor legislation of 1911*. Bull. Bur. Lab., Nov., 1911. Pp. 50.

CLEMENT, H. *Les forces ouvrières*. Réf. Soc., Feb. 16, 1912. Pp. 10.

Favors the organization of workmen into peaceful unions under the patronage of employers' associations.

DELAND, I. F. *The Lawrence strike: a study*. Atlantic, May, 1912. Pp. 12.

Conditions in Lawrence are the result of the operation of the laws of demand and supply and are no worse than in other textile centers. Emphasizes the need of conservative trade unions to check the spread of revolutionary organizations.

DOUGLAS, J. *Sir David Dale: iron-master, conciliator, arbitrator*. Engg. Mag., May, 1912. Pp. 13.

DURAN, P. *La protection du travail en Belgique*. Mouv. Social, May, 1912. Pp. 17.

EMERY, J. A. *Labor organizations and the Sherman law*. Journ. Pol. Econ., June, 1912. Pp. 13.

Holds that the Sherman law has been properly applied to labor organizations and that the latter should not be exempted from its provisions.

FAY, C. N. *The value of existing trade-unionism*. Atlantic, June, 1912. Pp. 13.

The writer, an employer, attacks the purposes and methods of the unions. Proposes that each employer encourage his employees to form a union of their own.

FREUND, E. *Constitutional status of workmen's compensation*. Illinois Law Rev., Feb., 1912.

Favorable to the constitutionality of such laws.

GERARD, C. *Organisation et résultat du syndicalisme féminin aux Etats-Unis*. (Concluded.) Mouv. Social, Apr. 15, 1912. Pp. 20.

What women's unions have accomplished in certain trades, particularly under stimulus from and the guidance of the National Women's Trade Union League.

GOMPERS, S. *Syndicalism, "partyism," and unionism*. Am. Federationist, May, 1912. Pp. 11.

"Syndicalism has not the faintest show of success in America." Trade unionism and legitimate political action will prove effective in the future as in the past.

GUYOT, Y. *Le minimum de salaire des mineurs britanniques*. Journ. des Econ., Apr. 15, 1912.

An unfavorable criticism of the provisions of the act and of the influences which secured its passage. It will not secure a lasting settlement.

HAMILTON, A. *What one stockholder did*. Survey, June 1, 1912. Pp. 3.

Brought about greatly increased protection against occupational diseases in the Pullman shops.

HANSON, W. C. *Attitude of Massachusetts employers toward the health of their employees*. Bull. Mass. State Board of Health, Mar., 1912.

HARLEY, J. H. *Syndicalism and the labour unrest*. Contemp. Rev., Mar., 1912. Pp. 10.

The teachings of Georges Sorel, which have in large measure caused the present labor unrest all over Europe.

HARRIS, H. J. *The increase in industrial accidents*. Quart. Pub. Am. Stat. Assoc., Mar., 1912. Pp. 27.

An examination of German, Austrian, and British statistics of industrial accidents and the causes of the apparent increase. Serious accidents have decreased, but those producing temporary disablement have increased,—in Germany and Austria at least.

HARRISON, S. M. *Nine years' experience under the anthracite conciliation board*. Survey, Apr. 20, 1912. Pp. 9.

HATCH, L. W. *Working conditions in New York city steam laundries*. Bull. N. Y. Dept. Lab., Mar., 1912. Pp. 16.

HOLDER, A. E. *Attitude of labor toward conciliation and arbitration in Great Britain*. Bull. Bur. Lab., Jan., 1912. Pp. 24.

Finds that labor organizations favor provisions for settlements by direct negotiations by their officials with employers without strikes, are strongly opposed to compulsory arbitration, and the majority do not favor submitting disputes to arbitrators appointed by the Board of Trade for final settlement.

HOLDER, A. E. *Railroad strikes since 1877—a triumphant record of trade-unions*. I. Am. Federationist, June, 1912. Pp. 7.

KERSHAW, J. B. C. *Labour unrest in the United Kingdom. II.* Engg. Mag., May, 1912. Pp. 9.

Proposes as remedies labor co-partnership, protective tariff, and legal prohibition of and preparation to meet the general strike.

LAMY, C. and others. *La Chambre de métiers de la Haute-Vienne. La question de l'apprentissage*. Réf. Soc., May 1, 16, 1912. Pp. 14, 18.

Account of and discussion of the organization of day courses of supplementary instruction for apprentices by the Chamber of Commerce of Limoges.

LAUCK, W. J. *Cotton operatives of New England*. Atlantic, May, 1912. Pp. 8.

The change in the racial composition of the labor force and in working and living conditions in the New England textile centers.

LAUCK, W. J. *The lesson from Lawrence*. No. Am. Rev., May, 1912. Pp. 8.

Working and living conditions in Lawrence are representative of those in all our industrial localities of the North and West. At least a temporary check upon immigration is urgently needed.

LEROY-BEAULIEU, P. *L'introduction en Europe de la législation australienne sur le régime du travail*. Econ. Franç., Mar. 23, 1912.

LOENING, E. *Das englische Genossenschaftsrecht*. Jahrb. f. Nat. Oek., III, 43, 1 & 2, 1912.

LOW, A. M. *Attitude of employing interests toward conciliation and arbitration in Great Britain*. Bull. Bur. Lab., Jan., 1912. Pp. 18.

Results of an inquiry made during the railway and dock strike of 1911. Found the employers substantially unanimous in favor of schemes of voluntary conciliation and arbitration, but opposed to arbitration under state sanction.

LUDERS, E. *Die Arbeiterfrage in den deutschen Kolonien*. Soziale Praxis, Apr. 11, 1912.

Emphasizes the necessity of training the natives to become efficient and dependable laborers and of state organization of the labor market to do away with the exploitation of both employers and natives by intermediary contractors.

MALLOCK, W. H. *Labour unrest as a subject of official investigation*. Nineteenth Cent., June, 1912. Pp. 16.

The labor unrest in the United Kingdom is due essentially to the extravagant beliefs of the laboring classes as to what they ought to have and may practically secure. These illusions are due to the present unsound system of education for the manual workers.

MARCH, L. *Some researches concerning the factors of mortality*. Journ. Royal Statist. Soc., Apr., 1912.

Considers, among others, industrial or occupational factors. Em-

phasizes that "the coefficients of mortality vary as much according to the grade of occupation (whether employers, salaried persons or workpeople) in an industry as according to the industry itself."

MUSSEY, H. R. *Trade unions and public policy*. Atlantic, Apr., 1912. Pp. 6.

A lesson from the McNamara case. The conclusion is reached that unless the employers recognize that they are public servants, the final solution of the labor question may be found in socialism.

NEAL, E. H. *The "open" shop*. No. Am. Rev., May, 1912. Pp. 12.

A unionist's argument for the closed shop, with particular reference to the fight of the carpenters of Greater New York against wood work from non-union mills.

NEILL, C. P. *Mediation and arbitration of railway labor disputes in the United States*. Bull. Bur. Lab., Jan., 1912. Pp. 63.

A valuable account of the workings of the Erdman Act of 1898. The results in each case are presented in tabular form and the general experience summarized. Two important cases are treated in detail. The writer is one of the mediators under the act.

PHELPS, E. B. *American brewery-workers' surprising rejection of their proffered workmen's compensation and old-age pensions—A clean-cut case of "the consciousness of kind."* Am. Underwriter, Apr., 1912. Pp. 16.

PICARD, R. *La journée de dix heures dans l'industrie*. Rev. Soc., Apr. 15, 1912.

RIBOUD, C. *Le parti ouvrier australien au pouvoir*. Rev. Sci. Pol., Mar.-Apr., 1912. Pp. 22.

An examination of the policies of the Australian Labor party since its accession to power in April, 1910, and of the sources of its strength. The recent defeat of its proposed constitutional amendments giving the federal government greater power over industrial relations is no more than a temporary check.

ROBERT, J. *Woman and the wage question*. Rev. Rev., Apr., 1912.

An argument for minimum wage boards, with particular reference to the proposed Massachusetts law.

SANVILLE, F. L. *Silk workers in Pennsylvania and New Jersey*. Survey, May 18, 1912. Pp. 6.

SMITH, H. H. *Workmen's compensation in Michigan*. Mich. Law. Rev., Feb., 1912.

SOMMERFELD, T. and others. *List of industrial poisons and other substances injurious to health found in industrial processes*. Bull. Bur. Lab., May, 1912. Pp. 27.

SUMNER, H. L. *Industrial courts in France, Germany, and Switzerland*. Bull. Bur. Lab., Jan., 1912. Pp. 192.

An account of the organization and procedure of special courts for the settlement of disputes arising in connection with labor contracts and the results accomplished by them.

STEWART, E. *Canadian industrial disputes act*. Survey, June 1, 1912. Pp. 4.

TAYLOR, T. C. *Profit-sharing and labour copartnership*. Contemp. Rev., May, 1912. Pp. 10.

Urges employers to adopt a form of profit-sharing by which laborer receives his bonus as dividends on stock of the company. Gives a number of instances of its successful working. Writer is an employer.

WILLIAMS, J. *Industrial combinations and labor conditions*. Am. Federationist, May, 1912. Pp. 4.

"The conditions of the workers from an economic and social standpoint were much superior under the old method of independent operation."

WINSLOW, C. H. *Conciliation, arbitration, and sanitation in the cloak, suit, and skirt industry in New York City*. Bull. Bur. Lab., Jan., 1912. Pp. 70.

A detailed account of the terms of settlement of the strike of 1910 and of the operations of the machinery established for the adjustment of disputes and securing sanitary conditions. Contains much information as to working conditions in the industry.

ZIMMERMANN, W. *Nachklänge zum britischen Bergarbeiterstreik*. Soziale Praxis, Apr. 25, 1912.

Praises the orderly conduct of the strike by the miners' unions, reckons its cost, and emphasizes the significance of the legal recognition of the minimum wage principle in a highly paid trade.

LUCAS, C. L. *Features of apprenticeship system at the G. E. Co.'s Lynn Works*. Mach., Apr., 1912.

——— *Canadian industrial disputes investigation act of 1907*. Bull. Bur. Lab., Jan., 1912. Pp. 18.

Presents the results of the operations of the boards provided by the Act of 1907. Is in continuation of articles in the *Bulletin* for May, 1908, and January, 1910. The material is taken from reports of the Canadian Department of Labour and the Fourth Report of the Registrar of Boards of Conciliation and Investigation.

——— *Conciliation and arbitration of railway labor disputes in Great Britain*. Bull. Bur. Lab., Jan., 1912. Pp. 41.

Gives the causes of the dissatisfaction of the men with the agreement of 1907 which culminated in the strike of August, 1911, the recommendations of the Royal Commission, and the present modified plan of conciliation and arbitration. The latter is by no means universally regarded as satisfactory.

——— *Conciliation and arbitration in Great Britain*. Bull. Bur. Lab., Jan., 1912. Pp. 38.

Summarizes activities of voluntary boards of conciliation and arbitration in the various trades and of the Board of Trade under the Conciliation Act of 1896 and the results attained.

——— *Cumulative index of labor laws and decisions relating thereto*. Bull. Bur. Lab., Nov., 1911. Pp. 38.

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- *Laws of various states relating to labor enacted since January 1, 1911.* Bull. Bur. Lab., Nov., 1911. Pp. 564.
- 
- *The minimum wage act—A substantial review of the British coal mine act.* Engg. Mag., June, 1912.
- 
- *Minimum wages in public contracts in Belgium.* Board of Trade Lab. Gaz., Feb., 1912. Pp. 2.

### Money, Prices, Credit, and Banking

(Abstracts by Fred Rogers Fairchild)

- ALLEN, W. H. *The false basis of the Aldrich plan.* Moody's Mag., May, 1912. Pp. 3.

Denies that the need of extra currency for handling the crops is an important cause of our banking troubles.

- ANSIAUX, M. *La concentration des banques allemandes.* Bull. Inst. Solvay, No. 20, 1912. Pp. 7.

Describes the consolidation of banks and the extension of their field beyond strictly banking functions, into dealings in securities, promotions, speculation, etc. Finds the causes in the rapid growth of population, wealth, and industry, the desire to divide risks the burden of the imperial stamp tax on the small banks, the crisis of 1900, etc. (A review of Riesser's "Die deutschen Grossbanken und ihre Konzentration.")

- ASHLEY, W. J. *Statistics and the theory of money.* Econ. Rev., Apr. 13, 1912. Pp. 4.

A criticism of the statistical method used by Professor Irving Fisher to verify the "equation of exchange."

- BAUER, S. and FISHER, I. *Preissteigerung und Reallohnpolitik.* Ann. f. Soz. Pol. u. Gesetz., I, 4-5, 1911. Pp. 38.

Demonstrates that prices have increased, by statistics from many countries. Discusses various possible causes. Examines historically the effect of increase in prices upon the purchasing power of wages. Argues for the necessity of an international inquiry into the cost of living and outlines the proper scope of such an inquiry.

- BRANDT, T. R. *The Fowler banking and currency bill.* Bankers Mag., June, 1912. Pp. 3.

Condemns the Aldrich banking plan and outlines briefly and recommends Congressman Fowler's bill of March, 1910.

- COHEN, E. *Les caisses d'épargne. Comment elles sont organisées et fonctionnent; de quelles améliorations elles sont susceptibles.* (Third paper). Rev. Intern. du Com., Mar. 31, 1912. Pp. 25.

Advocates certain reforms. Especially opposes large investment of funds in government obligations, which is dangerous alike to government and banks. Urges decentralization of savings bank funds; investment in local enterprises and works of social improvement; creation of a class of banks free from legal regulation; adoption of the



postal check, etc. Suggests ways of meeting competition of coöperative banks, insurance companies, etc.

DORRIAN, C. I. *Banks and banking in Hungary*. Moody's Mag., May, 1912. Pp. 4. Brief sketch.

ECKHARDT, H. M. P. *Canadian banking in 1911*. Bankers' Mag. (London), May, 1912. Pp. 7.

Statistical review of business in 1911. Special attention to the inability to issue sufficient notes in the fall.

ESCHWEGE, L. *Bankwelt und Terraingeschäft*. Die Bank, Apr., 1912. Pp. 6.

Calls attention to participation of banks in speculation in land and buildings in Berlin. Dangerous for the banks, and has led to a poor class of buildings. Describes the ordinary way of conducting the business, which has brought a crisis in the Berlin real estate market.

GIBSON, A. H. *Savings bank statistics. II*. Bankers' Mag. (London), May, 1912. Pp. 14.

Formulation and demonstration of a corollary of the "reciprocal law." (Continuation of article in April Bankers' Mag.; cf. AMERICAN ECONOMIC REVIEW, June, 1912, p. 482. To be continued.)

HITCHCOCK, G. M. *Local reserve associations*. Journ. Am. Bankers Assoc., Apr., 1912. Pp. 4.

Defends present banking system of the United States. Attacks centralizing tendencies of the Aldrich plan. Proposes a plan for independent local reserve associations, with note issue by the United States Treasury.

HOBSON, O. R. *Agricultural credit banks*. Journ. Inst. Bankers, June, 1912. Pp. 26.

A description and analysis of the systems of agricultural credit banks in the countries of Continental Europe, especially Germany and France; followed by a study of English agricultural conditions, reasons for the lack of such banks, and discussion of the system most likely to succeed.

LANSBURGH, A. *Die Landesflucht des Metallgeldes*. Die Bank, May, 1912. Pp. 12.

Describes the anxiety of the Belgian government over the continual export of its silver coin to France and elsewhere, a commission having been directed to investigate the subject. Shows that this is the natural result of the large uncovered note issue of the Belgian National Bank. Draws the same lesson from Germany's export of gold, in spite of continual gold purchases by the Reichsbank.

LANSBURGH, A. *Der Berliner Privatkredit*. Die Bank, Apr., 1912. Pp. 6.

Explains that, owing to the German practice of making payments at the end of each quarter-year, high discount rates are charged by the banks at these seasons. This has led to a distinction in the private rate of discount between long- and short-term loans, according as they

mature near the end of the quarter or not. Discussion of the consequences in the discount market.

LEXIS, W. *Vergleichende Untersuchungen über die Geschäftsentwicklung der Reichsbank.* Jahrb. f. Nat. Oek., Jan.-Feb., 1912. Pp. 32.

A critical examination of the development of the Reichsbank's business, with special reference to the gold reserve covering notes and deposits respectively, and with elaborate comparisons with the Bank of England and the Bank of France. Germany's industrial expansion, upon an insufficient basis of capital, has put a heavy strain on the Reichsbank's gold reserve.

LUFFT, H. *Nationaler Goldvorrat und zirkulierende Geldmenge.* Die Bank, Apr., May, 1912. Pp. 8, 7.

A theoretical examination of the monetary systems of Great Britain and Germany, with particular reference to the relation between the nation's standard money and its other forms of money and the relation between the national monetary system and the international standard, gold. Shows that the banking system has been compelled to assume the burden of maintaining the nation's gold reserve and that neither Great Britain nor Germany has developed a system adequate to this task.

MARCH, L. *L'influence de l'accroissement du stock monétaire sur les prix.* Journ. Soc. Statist., Mar., 1912.

MARTINDALE, J. *Our banks, what shall we do with them?* World's Work, Apr., 1912. Pp. 5.

Brief suggestions for the practical management of a commercial bank.

MCCALEB, W. F. *Guarantee of bank deposits.* Forum, June, 1912. Pp. 9.

Superficial account of the history of deposit guarantee, and argument in favor of its general adoption in the United States.

MCDUGALL, E. C. *Reserve Association and country banks.* Moody's Mag., May, 1912. Pp. 3.

Answer to F. E. Lyford's article in "Moody's Mag.," Apr., 1912, which criticized the proposed Reserve Association from the point of view of the country banker.

MOUSSE, C. *Les causes de la hausse des prix.* Réf. Soc., Apr. 1, 1912. Pp. 16.

Rejects such temporary causes as industrial speculation, excessive consumption and crop failures. There must be a permanent cause, which is the depreciation of money. Affirms the truth of the quantity theory of money when properly stated.

MURRAY, W. J. *Methods of banking in Ulster, Ireland.* Moody's Mag., June, 1912. Pp. 3.

Very brief description of character of business and its success.

NAENDRUP, H. *Die Entwicklung des Geldwesens in den deutschen Kolonien.* Blätter f. vergleich. Rechtswis. u. Volkswirtsch., Mar., Apr., 1912. Pp. 3, 14.

I. Description of the German monetary system with special reference to the legal tender quality of the several kinds of money and the circulation of foreign coin. II. Corresponding account of the systems of the various colonies (excepting German East Africa and Kiouchou) showing with much historical detail, how the system of the mother country has become the prevailing colonial system. (To be continued.)

PABST, F. *Oeffentliche Hypothekenbanken und Pfandbriefinstitute vom Standpunkt der Wohnungsfrage.* (*Die "Pfandbriefbank."*) Jahrb. f. Nat. Oek., Dec., 1911.

RAFFALOVICH, A. *La Reichsbank et la crise d'automne.* Journ. des Econ., Apr. 15, 1912. Pp. 8.

Shows how the bank conducted its business in face of the difficulties caused by the unusual extent of industrial and commercial undertakings, the increased speculation, and the political uncertainty, in the summer and fall of 1911.

RAFFALOVICH, A. *La production de l'or et le renchérissement.* Journ. des Econ., Apr. 15, 1912. Pp. 4.

Opposes the plan of an international inquiry into the rise of prices, with particular criticism of the ideas of Professor Irving Fisher as to the influence of the production of gold upon the price level.

— *The development of the rural banks affiliated to the Raiffeisen federation.* Bull. Bur. Econ. & Soc. Intelligence, Feb., 1912. Pp. 24.

A statistical record of the year 1909, with comparative figures for 1908, accompanied by brief analysis and discussion. Shows number of societies, amount and character of business done, profits and losses, general balance sheet, etc. Relates to Germany only.

— *Organization and development of land and agricultural credit in Egypt.* Bull. Bur. Econ. & Soc. Intelligence, Mar., 1912. Pp. 19.

Recent changes in legal and economic conditions which have stimulated investment in land mortgages. Brief accounts of the five banks furnishing credit. The relation of mortgage loans to agricultural conditions.

— *Mortgage credit in Austria.* Bull. Bur. Econ. & Soc. Intelligence, Mar., 1912. Pp. 18.

Description of the business and of the several classes of institutions engaged. Some statistics, showing growth of business and present amount of mortgages.

— *Wholesale prices, 1890 to 1911.* Bull. Bur. Lab., Mar., 1912. Pp. 195.

The regular annual report on prices in the United States. An elaborate statistical study, showing actual wholesale prices of 257 commodities for each month of 1911, average annual prices for each year, 1890-1911, relative prices for each month of 1911 and each year 1890-1911, as compared with the average for 1890-1899. Statistics are given in great detail and commodities are grouped in various ways. Full explanation of work, but little discussion of causes.

——— *Wholesale prices in Canada, 1890 to 1911.* Bull. Bur. Lab., Mar., 1912. Pp. 3.

Brief summary of report by Canadian Dept. of Labour, Ottawa, 1912.

——— *Les opérations de la Banque de France pendant l'année 1911.* L'Econ. Franç., Apr. 20, 1912. Pp. 3.

Extracts from the report of the bank's *Conseil General* to the shareholders. Mainly a discussion of the new arrangement between the bank and the government. Followed by statement of principal features of the bank's business in 1911.

——— *Preisbewegung der hauptsächlichsten Lebensmittel im Jahre 1911.* Reichs-Arbeitsblatt, Mar., 1912. Pp. 3.

### Public Finance

(Abstracts by C. C. Williamson)

ANTONY, A. *Le budget de l'Alsace-Lorraine. II.* Rev. Sci. Pol., Mar.-Apr., 1912. Pp. 16.

A second instalment. Describes at length the form of the budget, its preparation and voting. (To be continued.)

ASHLEY, P. *The financial systems of Germany.* (With discussion.) Journ. Royal Statist. Soc., Apr., 1912. Pp. 38.

A very useful survey of the German public revenues—imperial, state, and local.

BEAUREGARD, P. *Le nouveau budget.* Le Monde Econ., Apr. 20, 1912.

BIGENWALD, J. *La vie chère et les droits d'octroi sur le poisson de mer.* Rev. Pol. et Parl., Apr. 10, 1912. Pp. 17.

DE BOISSIEU, H. *Les taxes sur la plus-value foncière spécialement en Belgique.* Réf. Soc., June, 1912. Pp. 28.

BOND, B. W. *The quit-rent system in the American colonies.* Am. Hist. Rev., Apr., 1912. Pp. 21.

BRADDOCK, J. H. *Efficiency value of the budget exhibit.* Ann. Am. Acad., May, 1912. Pp. 7.

COSMETATOS, S. P. P. *L'impôt en revenue en Grèce.* Le Monde Econ., May 11, 1912. Pp. 3.

A general descriptive article with unfavorable criticism.

FERNI, G. *Les finances italiennes.* Rev. Econ. Intern., May, 1912. Pp. 6.

FREVILLE, E. *L'impôt sur le revenu dans les différents états de l'Europe (situation financière de la France).* Acad. Natl. de Reims. Trav., Vol. 128, 1911. Pp. 25.

GUYOT, Y. *Le budget de 1913.* Journ. des Econ., May, 1912. Pp. 15.

Criticism from the liberal point of view, of certain general tendencies in fiscal policy.

HUART, A. *La solution du problème fiscal.* Le Monde Econ., June, 1912. Pp. 3.

INGERSOLL, R. V. *Lighter taxation of buildings as a housing reform measure.* Nat. Munic. Rev., July, 1912. Pp. 3.

Brief summary of one of the remedies proposed by the New York Committee on Congestion.

LEROY-BEAULIEU, P. *Le gouffre: la croissance de plus en plus excessive des budgets français.* L'Econ. Franç., Apr. 20, 1912. Pp. 2.

LEROY-BEAULIEU, P. *Le gouffre: le gonflement des dépenses des divers départements ministériels depuis douze ans.* L'Econ. Franç., Apr. 27, 1912. Pp. 3.

LEROY-BEAULIEU, P. *Le réveil de l'impôt personnel et global sur le revenu.* L'Econ. Franç., May 4, 11, 18, 1912.

LEROY-BEAULIEU, P. *L'emprunt de 200 millions de la ville de Paris pour les habitations à bon marché.* L'Econ. Franç., Apr. 6, 1912.

LEROY-BEAULIEU, P. *De quelques économies budgétaires faciles à réaliser.* L'Econ. Franç., June 8, 1912.

LEVY, R. *Les fonds publics allemands.* Rev. Pol. et Parl., Apr. 10, 1912. Pp. 21.

LEVY, R. *La force financière des Etats.* Rev. des Deux-Mondes, May, 1912. Pp. 32.

An examination of the commonly accepted maxim that money and wealth alone determine the outcome of wars.

LOTZ, W. *Beiträge zur Literaturgeschichte des steuerfreien Existenzminimums. Eine Bentham-studie gewidmet zu Herrn Prof. G. F. Knapps 70. Geburtstag.* Archiv f. Socialw., Mar., 1912. Pp. 7.

MASCAREL, A. *L'impôt progressif sur les successions: ses conséquences sociales.* Réf. Soc., May 1, 1912. Pp. 5.

A general condemnation of the inheritance tax, even at the moderate rates now obtaining in France.

MILDSCHUH, W. *Ueber die Wirkungen der Erbschaftsteuer auf die österr. Kreditbanken und Vorschusskassen.* Ein Beitrag zur Steuerüberwalzungsfrage. Statsch. Monatschr., Mar., 1912. Pp. 34.

MOCHIZUKI, K. *L'état réel des finances Japonaises.* Rev. Econ. Intern., Mar., 1912. Pp. 29.

MURRAY, R. A. *I problemi fondamentali dell'economia finanziaria. (Contributo alla teoria dell'equilibrio finanziario.)* Giorn. degli Econ., Mar., 1912. Pp. 47.

PAYEN, E. *Le monopole des poudres.* L'Econ. Franç., May 18, 1912. Pp. 2.

The destruction of the Liberté in the harbor of Toulon is asserted to be causing serious doubts as to the wisdom of the government monopoly of the manufacture of powder, etc.

PLEHN, C. C. *The taxation of franchises in California.* Nat. Munic. Rev., July, 1912. Pp. 18.

Outlines the history of taxation of corporate franchises in Califor-

nia, with special reference to the changes introduced in 1911, when the taxation of franchises of every kind was transferred from local to state government, assessment being made by the state board of equalization and the proceeds used for state purposes. The assessed value of franchises, exclusive of railroads, jumped from \$29,000,000 in 1910 to \$160,000,000 in 1911.

POHLMAN, A. *Taxation of land values in Germany*. Single Tax Rev., Mar.-Apr., 1912. Pp. 3.

A special number on Germany and contains translations of many articles by Germans on the single tax and other methods of land reform.

PULTZ, J. L. *Economy and efficiency in the Department of Water Supply, Gas and Electricity of New York City*. Ann. Am. Acad., May, 1912. Pp. 8.

A description of serious efforts to apply "scientific management" to a large public business.

ROY, G. *La prestation. Etude critique*. Rev. Gen. d'Admin., Apr., 1912. Pp. 24.

RUDLOFF, H. L. *Die Idee der Einkommensteuer in Frankreich*. Jahrb. f. Nat. Oek., Mar., 1912.

SANDS, H. R. and LINDARS, F. W. *Efficiency in budget making*. Ann. Am. Acad., May, 1912. Pp. 13.

Argument in favor of "standardized" "segregated," and "functionalized" municipal budgets.

STEEL-MAITLAND, A. D. *The finance of the home rule bill*. Nat. Rev., June, 1912. Pp. 17.

STOCKBRIDGE, F. P. *Single taxers*. Everybody's, Apr., 1912.

STOURM, R. *L'armature des budgets*. L'Econ. Franç., June 8, 1912. Pp. 2.

The French budget is still shielded from the assaults of excessive expenditure by the rules and regulations which have long attended its preparation and execution. The question is how long they will be able to ward off the enemy.

TANGORRA, V. *Delle pubbliche imprese e delle entrate che ne provengono*. Giorn. degli Econ., Mar., 1912. Pp. 43.

VOGEL, E. H. *Die Aufgaben der Sozialpolitik in der Steuergesetzgebung*. Archiv f. Sozialw., Mar., 1912. Pp. 41.

WILLIAMS, E. T. *Taxation in China*. Quart. Journ. Econ., May, 1912. Pp. 29.

A timely and informing article.

WILLIAMS, T. T. *The rate of discount and the price of consols*. Journ. Royal Statist. Soc., Mar. & May, 1912. Pp. 32, 6.

XENOPOL, N. *Le budget de l'état roumain pour l'exercice 1912-1913*. Mouv. Econ., Apr., 1912. Pp. 5.

— *The budget. Tampering with sinking funds*. Bankers Mag. (London), May, 1912. Pp. 7.

Criticism of recent liberal finance for extravagant expenditure and neglect of sinking funds.

——— *Classified distribution of salaries and wages of the city employees of Chicago.* Engg. News, May 2, 1912. Pp. 2.

——— *The modern English exchequer.* Accountant, Mar. 23, 30, Apr. 6, 1912. Pp. 6.

Three articles describing the workings of the English exchequer as it exists to-day.

——— *State tax on bonds and unrecorded mortgages.* Greater N. Y., May 27, 1912. Pp. 1.

Explains some important provisions of New York tax on "secured debts."

——— *Le budget de 1912.* Bull. Stat. et de Leg. Comp., Feb., 1912. Pp. 34.

——— *La commission sénatoriale et l'impôt sur le revenu.* L'Econ. Franç., May 4, 1912. Pp. 2.

——— *L'exposé des motifs du budget de 1913.* L'Econ. Franç., Apr. 27, 1912. Pp. 2.

——— *Le projet de budget pour l'exercice 1913.* Bull. de Stat. et de Leg. Comp. Apr., 1912. Pp. 45.

——— *Produits des contributions indirectes pendant l'année 1911.* Bull. Stat. et de Leg. Comp., Mar., 1912. Pp. 44.

——— *Statistik der württembergischen Einkommensteuer für 1910.* Württembergische Jahrbücher für Statistik und Landeskunde, Jahrgang, 1911.

An annual report begun in 1905.

### Tariffs and Reciprocity

(Abstracts by Henry R. Mussey)

GUBBINS, J. H. *Some thoughts on tariff reform.* Econ. Rev., Apr. 15, 1912.

KREUZKAM. *Die internationale Zuckerkonvention.* Jahrb. f. Nat. Oek., Mar., 1912. Pp. 6.

RIDDELL, W. R. *International trade relations and reciprocity between Canada and the United States.* Queen's Quart., Apr.-June, 1912.

A historical review of the trade relations of Canada and the United States from the treaty of 1783 to the abrogation of the reciprocity treaty in 1866.

STRUVE, P. *The Anglo-Russian trade treaty of 1734.* Russian Rev., No. 2, 1912.

UNDERWOOD, O. W. *High tariff and American trade abroad.* Century, May, 1912.



WELD, L. D. H. "Costs" and the tariff board. *Journ. Pol. Econ.*, May, 1912.

A reply to Professor Willis' article in the May, 1911, *Journal*. Defends the determination of costs as a basis for fixing tariff rates, and emphasizes the practical usefulness of the tariff board.

### Insurance and Pensions

(Abstracts by William F. Gephart)

ACKLAND, T. G. *Report on the estimated financial effect of amendments introduced in committee in Part II of the bill.* *Journ. Inst. Actuaries*, Jan., 1912. Pp. 10.

A report made to the English treasury on the financial effects of the National Insurance Act.

BISHOP, A. L. *Government regulation of insurance in Canada.* *Am. Pol. Sci. Rev.*, May, 1912.

Both the federal and the provincial governments incorporate companies, and while the federal charter confers the right to do business in all provinces yet the companies are subjected to local regulations. The business as compared with regulations in the United States is not "oversupervised." The federal law of 1910 is a result of the investigations of a Royal Commission.

BOHREN. *Das schweizerische Gesetz über die Kranken- und Unfallversicherung.* *Zeitschr. f. Versicherungs-Wissenschaft*, May, 1912. Pp. 7.

On account of the law of 1900 being rejected, the present law had to include some objectionable features. A monopoly of compulsory accident insurance is established but private companies are subsidized for sickness insurance. Such companies must qualify as to rates, resources and policy provisions.

BOYD, J. H. *The economic and legal basis of compulsory industrial insurance for workmen.* *I. Mich. Law Rev.*, Mar., 1912.

BRODSKY, R. T. *Is the German industrial insurance system a failure? A reply to Dr. Friedensburg.* *Survey*, May 4, 1912.

Discounts the criticisms of Dr. Friedensburg against the German industrial insurance, holding that some of his criticisms were overdrawn and some of the causes for criticism have been removed since his resignation from the office of President-Administrator.

DAWSON, W. H. *German social insurance and poor relief.* *Contemp. Rev.*, May, 1912. Pp. 5.

The original idea of compulsory insurance was to reduce the necessity for poor relief but this idea has been expanded into one of social providence and national hygiene. Owing to increase of population and its concentration and to developed social consciousness the entire system of public care of the poor has broadened and deepened.

GATY, T. E. *Evolution and revolution of liability insurance.* *Am. Underwriter*, Mar., 1912. Pp. 10.

An interesting description of the changes in this insurance since its

beginning in 1886. Conditions are changing so rapidly that it is almost impossible to adjust rates to meet them.

HARDY, G. F. and WYATT, F. B. *Report on the revision or extension of the original estimates, caused by changes effected in committee in Part I of the bill.* Journ. Inst. Actuaries, Jan., 1912. Pp. 25.

Explains the calculations made for the treasury of the amounts required to meet the provisions of the National Insurance Act. Numerous tables for different ages and calculations are given.

HASTINGS, H. *Dangers of state insurance.* No. Am. Rev., May, 1912. Pp. 10.

A statement of the oft repeated but not proven objections to social insurance and mere assertions of its failure wherever it has been tried.

JAHN. *Studien über Rückversicherung.* I. Zeitschr. f. Versicherungs-Wissenschaft, May, 1912. Pp. 10.

The first part of a monograph on reinsurance, discussing its meaning, nature and objects. A very detailed and complete discussion is promised.

LEPELLETIER, F. *L'Etat assureur.* Réf. Soc., May, 16, 1912.

The Italian parliament has recently made a state monopoly of the business of life insurance but the author holds that fire insurance affords a better opportunity for monopolization by the state, for "it is the most common danger to which the property and lives of all are exposed." However, the writer maintains that the state can better occupy itself than by taking up even fire insurance for the private companies are satisfactorily meeting the needs. The industry is not affected with a public interest such as the railway and moreover the danger from fire is decreasing.

MANES. *Ueber die Grenzen der Privat- und der Sozial-Versicherung.* Zeitschr. f. Versicherungs-Wissenschaft. May, 1912. Pp. 16.

The scope of obligatory insurance has been increasing so that the phrase "workers insurance" has given way to the more accurate expression "social insurance." The essential distinction between social and private insurance consists in its socio-political motive. Social insurance ought not to restrict the field of private insurance. Its cost is not, as is often stated, lower than private insurance. Some effort has been made in Germany to have the private companies act as agents for social insurance. Good risks secure better terms in private companies but poor risks must resort to social insurance. The critical point in determining boundary line between the two kinds of insurance is how large a number of these good risks which secure the benefit at a high cost must be included in order to make the insurance of a certain social class feasible. Political and governmental considerations rather than scientific ones will probably govern for a time. Social insurance may weigh heavily on industry, depending on whether the industry is one for export or for domestic production or for both. Should not the ultimate goal of social insurance be the stimulation of voluntary insurance? The article is most excellent for all students of economics.

MAY, G. E. *The investment of life assurance funds.* Journ. Inst. Actuaries, Apr., 1912. Pp. 33.

The writer compares investments of insurance funds with insuring abnormal lives. Abnormal investments like abnormal lives often yield good returns. Those companies which have spread their investments tend to show the best returns. An excellent article, based on careful investigation.

MOEBIUS. *Die Kollektiv- Unfallversicherungen der Studierenden an deutschen Universitäten.* Zeitschr. f. Versicherungs- Wissenschaft, May, 1912. Pp. 40.

In 1890 the technical high school of Stuttgart began to insure its students against accidents and at present out of thirty-six higher institutions only three are without such insurance. The terms differ but the period is usually during a semester. The range of accidents insured against differ, but all include accidents occurring in the university buildings.

POINDEXTER. *A review of the operations for the first four months of the state of Washington's workmen's compensation act.* Am. Underwriter, May, 1912. Pp. 7.

Many trivial accidents were at first reported until the commission refused to consider any which did not cause at least a loss of 5 per cent of the time for a month. Only one of the forty-eight classes of industries show a deficit in funds. This one is manufactures of powder and fireworks and in this class there was a serious disaster, causing a heavy assessment on the remaining four plants which they have refused to pay, pending a decision from the courts.

PORRITT, E. *The British national insurance act.* Pol. Sci. Quart., June, 1912. Pp. 20.

Discusses the general character and provisions of the act and its parliamentary history.

REY, E. *L'assurance agricole.* Rev. de la Prévoyance et de la Mutualité, Apr., 1912.

ROSENSTOCK. *Kommunale Arbeitslosenversicherung?* Soziale Praxis, May 16, 1912.

WEHBERG. *Zu den Gutachten über das italienische Staatsversicherungsmonopol.* Zeitschr. f. Versicherungs-Wissenschaft, May, 1912. Pp. 7.

A discussion of the opinion of a number of legal authorities of Europe as to the liability of the Italian government to indemnify foreign insurance companies owing to the monopolization of life insurance by the federal government. The author agrees, but holds that the liability rests not on principles of national law but on private international rights and trade agreements.

WEYDMANN, J. *Arbeitslosenfürsorge.* Soz. Kultur, Apr., 1912. Pp. 27.

— (Editorial) *The equitable group plan.* Life Ins. Independent, May, 1912. Pp. 6.

Describes a recent policy of this company which insures without

medical examination the employees of a large mail-order house. The employer insures them for one year's wage on the yearly renewable term plan.

— *Great Britain's commitment to state insurance. An outline of the principal phases which will shortly become operative.* Am. Underwriter, May, 1912.

— *The most recent results given by the agricultural insurance institutions.* Bull. Bur. Econ. & Soc. Intelligence, Mar., 1912.

Compulsory cattle insurance is in force in only one of the Belgian provinces. The society compensates for all loss due to slaughter by order of the authorities and rejection of the meat as unfit for consumption.

— *National insurance and some allied problems.* Clare Market Rev., Feb., 1912.

— *The national insurance act: compulsory insurance against sickness and unemployment.* Bull. Bur. Econ. & Soc. Intelligence, Mar., 1912. Pp. 113.

— *Social insurance in Germany and the German farmer.* Bull. Bur. Econ. & Soc. Intelligence, Feb., 1912.

A complete description of the extent and means by which the German farmer is insured against sickness, invalidity and accidents. In general insurance is compulsory for all receiving remuneration in money or kind for their work. The plan permits a collaboration of the old voluntary associations with the new compulsory feature. The writer holds that the plan will lay a heavy burden on the employer.

### Population and Migration

(Abstracts by William B. Bailey)

ANDREWS, J. B. *The beginning of occupational disease reports.* Journ. Am. Medical Assoc., Dec. 16, 1911. Pp. 4.

A short statement of the attempts which are being made in six American cities to determine the extent of occupational diseases.

CANCE, A. E. *The decline of the rural population in New England.* Quart. Pub. Am. Stat. Assoc., Mar., 1912. Pp. 5.

The towns in which there has been the greatest decrease of population are those which are most purely agricultural. There are five towns in western Massachusetts which reported a larger population in 1790 than at any succeeding census and of the sixty-two towns in this section, only six attained their maximum population between 1880 and 1910.

CLERGET, P. *Depopulation of rural districts in Germany.* Géographie, 24, 1911. Pp. 3.

DEMARTIAL, G. *La décroissance de la population, un palliatif.* La Grande Rev., Feb. 25, 1912.

EDMOND, J. *The birth-rate and afterwards*. Nat. Rev., June, 1912.

ELBERTON, W. P. *Some recent statistical results*. Journ. Inst. Actuaries, Apr., 1912. Pp. 30.

A plea to life insurance companies to pay more attention in their premiums to the life histories and ancestry of the insured. A valuable portion of this able article is a bibliography of the most important articles along the lines of eugenics and race degeneration.

FUETER, E. *Normale Schwankungen der Natalität*. Archiv f. Socialw., 34, 1, 1912.

GODDARD, L. H. *The rural population of Ohio: where is it increasing and decreasing? Why?* Ohio Sta. Circ., 116. Pp. 6.

HARRIS, J. A. *Assortative mating in man*. Pol. Sci. Mo., May, 1912. Pp. 17.

A scientific statistical discussion of the claims of preferential and scientific mating. The coefficient of correlation is in each case viewed in order to determine whether man in mating selects women with like qualities or with unlike qualities. The result of the investigation seems to show that they are more likely to select mates with similar qualities.

HOORWICH, I. A. *Immigration and crime*. Am. Journ. Sociol., Jan., 1912. Pp. 13.

A study of the relative increase of population and crime in New York state since 1850. The author thinks that "an increase of the percentage of the foreign born population is accompanied by a decrease of criminality, and vice versa." Either the new environment enables immigrants with criminal records to keep within the law, or the criminal classes of Europe furnish less than their quota to the number of immigrants.

KAWAKAMI, K. K. *Japanese immigration*. Oriental Rev., May, 1912. Pp. 3.

The statistics of Japanese immigration to this country for the last four years are studied and the conclusion is reached that it is better to allow the present gentleman's agreement than to attempt to deal with the matter by a law enacted by this country.

LING, B. *Causes of Chinese emigration*. Ann. Am. Acad., Jan., 1912. Pp. 6.

The peculiarities of Chinese emigration seem to be that they come from certain sections only of the Empire, go only where their fellow countrymen are to be found, and almost always expect to return home again. Only the least favored classes come as a rule. Both political and economic forces have united in causing this emigration.

MILLIS, H. A. *East Indian immigration to the Pacific coast*. Survey, June 1, 1912. Pp. 8.

Canada has practically stopped the immigration of Hindus by requiring a continuous voyage and a head tax of \$200; the United States, by a strict interpretation of the law. Most of the Hindus in this country are now in California, engaged in temporary and unskilled labor. Their labor is not highly esteemed by employers.

REYNAUD, L. *L'émigration chinoise*. Réf. Soc., Mar. 1, 1912. Pp. 8.

A study of the migrations of Chinese during the past twenty years to different sections of China and to foreign countries. Group migrations seem to have practically ceased while the migrations of individuals are increasing. The causes of these migrations appear to be largely economic. Accurate statistics are difficult to obtain, but it is probable that there are at least a million Chinese at present residing in foreign countries and the annual emigration from China amounts to at least 50,000.

THIRRING, G. *Die Bevölkerungsentwicklung der ungarischen Städte*. Ungarische Rundschau, Apr., 1912. Pp. 21.

Apparently the first of two or more articles dealing with the growth of the population of the cities in Hungary. The enumerations during the eighteenth century were made in 1720, 1777, 1782, and 1787. In addition to the total population in the cities the distribution by religious confession and also by nationality was made. It promises to be a valuable series of articles.

————— *European and American water supplies and typhoid death rates*. Engg. News, Apr. 18, 1912. Pp. 2.

The main contention of this article is that the climate undoubtedly plays a part in the determination of the typhoid death-rate and that it is something more than chance that a large proportion of the cities in this country with an excessive death-rate from this disease are in the southern states.

————— *Immigration and employment of Polish farm labourers in France*. Bull. Bur. Econ. & Social Intelligence, Feb., 1912.

————— *The Irish congested districts board*. Progress, Apr., 1912. Pp. 79.

————— *Les maladies professionnelles*. Rev. Intern. du Com., Mar. 31, 1912. Pp. 38.

A discussion of two propositions made respectively by Breton and Laurent dealing with the indemnification which should be given to laborers for the diseases which are peculiar to certain industries.

### Housing

(Abstracts by James Ford)

ARONSON, H. *Rural housing: a lesson from Hertfordshire*. Contemp. Rev., May, 1912. Pp. 5.

States the experience of the village of Chipperfield showing that "Mr. Balfour's Housing Act (1890) failed because it was cumbersome and optional; and building cottages under it placed a burden upon the rates." "Mr. Burns' Act (1909) is succeeding because he has made his act obligatory, not optional, and by extending the period for repayment of the loan he has enabled cottages to be built without adding to the rates."

ARONSON, H. *Rural housing*. Westminster Rev., June, 1912. Pp. 8.

The British Housing Act of 1890 failed to promote rural building because its administration lay in the hands of the rural district councils. The Housing and Town Planning Act of 1909 has increased several fold the annual condemnation of unsanitary cottages and the building of municipal cottages. Still, cottages erected cannot be rented at a price which the agricultural laborer can pay and be self-supporting. In Ireland the government bears 36 per cent of the annual charge in respect to each loan obtained by a Rural District Council. The Griffith Boscawen housing bill of 1912 seeks to apply the same principle to England.

HOBSON, C. *Watkley, a fifty-year-old workingman's garden suburb.* Town Planning Rev., Apr., 1912. Pp. 7.

Describes land societies of 3000 workingmen members which developed about 292 acres in the suburbs of Sheffield. The movement does not grow because of "the exorbitant demands made by the Sheffield Corporation during recent years for road dedication."

HUBERT-VALLEROUX. *A propos de la cherté des loyers.* Réf. Soc., June 1, 1912. Pp. 8.

Finds high rents due to taxes, to high wages and short work of building trades, to municipal demolition of house property through street widening, and to the difficulties which small landlords are under in obtaining through the courts the payment of rents in arrears.

LEROY-BEAULIEU, P. *La ville de Paris et les habitations à bon marché.* L'Econ. Franç., Apr. 13, 1912. Pp. 3.

The vote of the Paris Municipal Council to borrow 200 million francs to build cheap dwellings is discredited. The whole sum should be used to house families with more than three children.

LEVETUS, A. S. *Une cité ouvrière en Autriche.* Rev. d'Econ. Polit., Mar.-Apr., 1912. Pp. 13.

Description of the "welfare institutions" of the Krupp industrial village at Berndorf.

NEWMAN, B. J. *Women's work for housing reform.* Am. City, June, 1912. Pp. 4.

MEYER, H. H. B., editor. *Check list of references on city planning.* Special Libraries, May, 1912. Pp. 62.

Compiled by the division of bibliography, Library of Congress, and the department of landscape architecture, Harvard University.

OUTHWAITE, R. L. *Battle with the slum.* Land Values, May, 1912.

Gives statistics and examples of overcrowding in Glasgow. Municipal tenement building and "ticketing" of houses does not reduce crowding. The Municipal Corporation has voted in favor of levying tax for local purposes on the valuation of land.

PEASE, E. R. *Country cottages and cabinet responsibility.* Westminster Rev., Apr., 1912. Pp. 7.

Extracts from memorial sent to Postmaster General by Postmen's



Federation urging that P. O. Department house its employees. Examples cited from the prevalent lack of sanitary dwellings in villages.

POHLE, L. *Wohnungsmarkt und Wohnungspreise in Zürich von 1896 bis 1910.* Zeitschr. f. Socialw., Jan. 3, 1912. Pp. 2.

From 1896-1900 the percentage of empty dwellings rises from 4.8 per cent to 5.6 per cent. Rents fall till 1903; then the percentage of empty dwellings declines, remaining at 0.3 per cent to 0.5 per cent till 1909. Rents rise in this second period.

SONTAR, A. S. *Some notes on the act in practise.* Town Planning Rev., Apr., 1912. Pp. 7.

Comments upon the building provisions of the Town Planning Act as operated in the parish of Ruislip-Northwood.

STRONG, H. *What kind of homes? How a chamber of commerce has helped solve the housing problem.* Am. City, Apr., 1912. Pp. 5.

Outlines what has been accomplished by the housing committee of the Cleveland Chamber of Commerce in surveying and reporting unsanitary dwellings, improving building and health laws, and reorganizing the Board of Health with a tenement house division.

— *Extract from debates in the House of Commons on small holdings, the Housing and Town Planning Act and rural housing, the Cottage Homes for Aged Persons bill, and the Acquisition of Land bill.* Land Values, Supplement, May, 1912. Pp. 12.

— *Decision of New York courts; definition of tenement house.* N. Y. Lab. Bull., Mar., 1912. Pp. 4.

Abstract of the Grimmer v. the Tenement House Department of the City of New York case in the supreme court and the court of appeals. An act has since been passed including apartment houses within the jurisdiction of the tenement house department.

— *Library Bulletin No. 6 on improved housing.* Bull. N. Y. Sch. Philan., May, 1912. Pp. 3.

A selected bibliography with comments; classified geographically.

— *Les habitations a bon marché a l'Hotel-de-Ville.* Le Monde Econ., Apr. 13, 20, 27, 1912. Pp. 12.

Opposes municipal building of tenements in Paris.

— *Der internationale Hausbesitzerkongress.* Soziale Praxis, May 16, 1912. Pp. 2.

Brief abstracts of papers read at the Berlin congress of May 6-8, 1912.

— *Die Wirkungen der kommunalen Bodenpolitik in Frankfurt a. M.* Zeitschr. f. Socialw., May 6, 1912. Pp. 2.

Extensive land ownership in Frankfurt has not reduced land prices or house rents.

— *Das Wohnelend in Gross Berlin.* Soziale Praxis, March 7, 1912. Pp. 3.

Wohnungs- und Bauwesen. Blätter f. d. ges. Sozialwis., Apr., 1912.  
Pp. 2.

Bibliography of housing, land question, and city planning.

### Statistics

(Abstracts by A. A. Young)

CRUM, F. S. *The records of loss of life and property on American shipping.* Am. Underwriter, Feb., 1912.

History and criticism of American statistics, which compare unfavorably with those of the British Board of Trade.

FOVILLE, A. DE. *Napoléon statisticien.* Journ. Soc. Statist., Dec., 1911.

A number of interesting facts and anecdotes are brought together to indicate the importance which Napoleon attached to accurate statistical information.

FREEMANTLE, H. E. S. *The statistics of South Africa.* Journ. Royal Stat. Soc., Feb., 1912.

The industrial instability of South Africa, its racial differences, and the governmental problems introduced with the Union necessitate the development of an adequate central statistical service, and these same facts also put difficulties in the way.

GUYOT, Y. *Des rapports de la production de l'or et des index numbers de The Economist et de Sauerbeck.* Journ. Soc. Stat., Mar., 1912.

Lack of correlation between the changes in the annual production of gold and the movement of prices is taken as proving the falsity of the "quantity theory."

HEWES, A. *Marital and occupational statistics of graduates of Mount Holyoke College.* Quart. Pubs. Am. Stat. Assoc., Dec., 1911.

An important investigation, based on well chosen tabulations of returns from 2,827 graduates. The tables showing age at marriage, number of children, occupations, and earnings are especially illuminating.

LAZARD, M. *Le coefficient de risque professionnel de chômage.* Journ. Soc. Stat., Jan., 1912.

Complementary to the author's work, *Le Chômage et la Profession.* The "coefficient" is the ratio of the number of unemployed workmen in any one industry to the average for all industries. Comparisons of the results of different censuses show a high degree of constancy in these coefficients.

MACDONALD, A. *Mental ability in relation to head circumference, cephalic index, sociological condition, sex, age, and nationality.* Quart. Pubs. Am. Stat. Assoc., Dec., 1911.

Based on a study of Washington school children. The results (which have been published before) deserve a more adequate analysis than is given.

MANSION, P. *La quotité de vie d'une nation comme index unique de sa situation économique et morale.* Rev. Quest. Sci., Oct., 1911.

MARCH, L. *La théorie statistique et la logique formelle à propos de l' "Introduction" de M. Yule.* Journ. Soc. Statist., Oct., 1911.

An able review of Yule's recent work, including a discussion of the bearing of Yule's "theory of attributes" and Pearson's "theory of contingency" upon some of the theorems of formal logic.

MARCH, L. *Mouvements du commerce et du crédit, mouvement ouvrier en relation avec le mouvement des prix.* Bull. Stat. Gén. de la France, Jan., 1912.

A useful compilation of statistics of railroad traffic and gross earnings, ocean navigation, foreign commerce, postal receipts, bank loans, reserves and clearings, discount rates, wages, labor unions and strikes, for the more important countries, with many diagrams.

MARCH, L. *L'influence de l'accroissement du stock monétaire sur les prix.* Journ. Soc. Stat., Mar., 1912.

In general agreement with the views of M. Guyot, noted above.

MEERWARTH, R. *Betrachtungen über Methoden und Ergebnisse der deutschen Arbeitsmarkstatistik.* Archiv. f. Sozialw., XXXIII, 3, 1911.

MENDELSON, M. *Die Entwicklungsrichtungen der deutschen Volkswirtschaft nach der neuesten deutschen Statistik.* Zeitschr. f. Socialw. March, 1912.

A general statistical resumé.

NECCO, A. *I prezzi delle merci in Italia nel 1910.* Rif. Soc., Dec., 1911.

Extension into 1910 of the author's index number of Italian prices, previously given for 1881-1909. The index is based on prices of exports and of imports.

PEARSON, K. *The opsonic index "Mathematical error and functional error" (with nine diagrams).* Biometrika, July, 1911.

PISSARJEVSKY, L. DE. *Note sur le coefficient de chômage par sexe et par âge dans divers groupes professionnels.* Journ. Soc. Stat., Jan., 1912.

Although there is relatively less unemployment among women workers than among men, this statement does not hold true for all occupational groups, and the difference is more significant in some age groups than in others.

ROBINSON, L. N. *Two methods of estimating the growth of criminality in the United States.* Quart. Pubs. Am. Stat. Assoc., Dec., 1911.

Given the number of prisoners under a sentence of a stated length, the number of commitments during the preceding year can be estimated on the assumption that commitments and population have been growing in the same ratio; or given also the number of commitments during the year, an inference can be made as to whether commitments are increasing more rapidly than population.

ROULLEAU, G. *La production et les mouvements internationaux des métaux précieux au début du vingtième siècle.* Journ. Soc. Stat., Feb., 1911.

A compilation of statistics, without indication of their sources.

SERGI, G. *La presunta influenza dell' ambiente sui caratteri fisici dell' uomo.* Riv. Ital. di Sociologia, Jan.-Feb., 1912.

In a report to the Immigration Commission, Professor Boas had held that under the influence of environment our immigrants tend toward a single physical type; notably, changes in the shape of the skull take place. Professor Sergi, limiting the detail of his criticism to the case of Jewish immigrants, concludes that "The method pursued by him is not exact and cannot justify his surprising conclusions."

VIRGILII, F. *Note sur la théorie des variations statistiques.* Journ. Soc. Stat., Jan., 1912.

An elementary exposition, with examples, of the methods of measuring the mutual dependence of two statistical series. A simple "index of variation," March's "*coefficient de dépendance*" and the correlation coefficient are compared. The author's conclusion that his results indicate the superiority of the correlation coefficient cannot be given much weight, for he uses this index in an erroneous manner.

WILSON, G. B. *A statistical review of the variations during the last twenty years in the consumption of intoxicating drinks in the United Kingdom, and in conviction for offenses connected with the intoxication.* Journ. Royal Statist. Soc., Feb., 1912.

An elaborate and careful survey (65 pp.) of available statistics. Finds a real connection between the consumption of intoxicants and the number of offenses. The amount of intoxicants consumed decreases in periods of business depression. A general decrease is observed since 1900. This essay was awarded the Statistical Society's Howard Medal for 1911.

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*La XIII<sup>e</sup> session de l'institut international de statistique.* Bull. Stat. Gén. de la France, Jan., 1912.

Very full abstracts of the papers and reports presented at the recent meeting of the Institute at The Hague.

## NOTES

Plans have been maturing rapidly for the Fifteenth International Congress on Hygiene and Demography, which is to be held in Washington, September 23-28, on the invitation of the United States. Many countries have chosen only hygienists to represent them at the congress, so that not as many foreign demographers will attend as might be wished. Still, a number of distinguished foreign statisticians will be present. Among those who will participate in the meetings of the demographic section are M. Lucien March, Director of the General Statistics of France, Dr. Jacques Bertillon, Chief of the Bureau of Municipal Statistics, Paris, and M. Arthur Fontaine, Director of Labor, from France. From Germany, Dr. Friedrich Zahn, Director of the Bavarian Royal Statistical Office, and Dr. Eugen Würzburger, Director of the Royal Statistical Office of Saxony, are expected. The Nestor of German statistics, Dr. George von Mayr, will be unable to attend, but is sending a paper on "The general problems of criminal statistics, especially field and method." The illness of Dr. Arthur Newsholme and the pressure of work on the English census of 1911 at the General Register Office will probably diminish the number of British demographers who will attend. Representatives from Canada and Australia, however, are already enrolled on the program.

Among the main topics for discussion are: The development of vital statistics in the United States since 1900 and the outlook for the future, the classification of causes of death, the training of demographers here and abroad, infant mortality, criminal statistics, statistics of marriage and divorce. A joint meeting will be held on the hygiene of occupations, at which the measurement of the healthfulness of occupations will be discussed and the relation of alcohol to diseases and death.

According to the rules of the congress, English, French or German may be used in the papers and discussions, but outlines of all the papers, including those presented in foreign languages, and probably in some cases the full text of the papers will be ready for distribution when the congress opens. The printed proceedings will probably occupy several volumes and will epitomize the present position of the public health movement in the civilized countries. Any person interested in such matters may become a member of the congress and entitled to receive a report of its meetings on sending the fee of \$5 to Dr. John S. Fulton, secretary-general, whose address is Senate Annex, Washington, D. C.

THE CHAMBER OF COMMERCE OF THE UNITED STATES OF AMERICA. In the fall of 1907, Oscar S. Straus, then Secretary of Commerce and Labor, following out a suggestion made in a report by the writer embodying the results of his observations of the workings of official and semi-official organizations for the promotion of foreign commerce in European countries,<sup>1</sup> called together a conference of representatives of chambers of commerce, boards of trade and trade organizations, which met in Washington on December 5 and 6, 1907. The object of that conference was to create an organization representative of the commercial and industrial interests of the country, which would serve as a connecting link between the Department of Commerce and Labor and the business world. It was to keep the department informed of the desires and needs of the industrial and commercial interests and in turn keep the latter in touch with the plans, activities and results of the department's efforts in the promotion of the commerce of the country.

The conference resulted in the creation of a National Council of Commerce, from which a great deal was expected but which, after about two years of precarious life, went out of existence. Its failure was due to several causes, chief among them being the fact that the constituent bodies were made up largely, if not chiefly, of commercial bodies whose interests were mainly local rather than national, and to a defect in the make-up and management of the organization in failing to provide for active, unrestrained and personal coöperation between the council and the active workers in the department, free from the usual red tape for which Washington is known.

The new Chamber of Commerce of the United States of America is the result of an attempt on the part of the Department of Commerce and Labor and a few broad-gauged leaders in the business world to try once more to create a body that would, in a way best fitted to American conditions, undertake to perform the functions so well discharged by the European chambers of commerce which form an integral part of the body politic in European countries.

The new body met in Washington, in response to a call of the President of the United States, under the auspices of the Department of Commerce and Labor, on April 22. Its make-up, through the greater predominance of organizations with broad national interests, is more promising of success. The ultimate outcome of the venture will depend

<sup>1</sup> *Promotion of Foreign Commerce in Europe and the United States*, by N. I. Stone, Department of Commerce and Labor, Washington, 1907.

on the ability of the organization to block out a line of work which shall combine efficient promotion of the commercial and industrial interests of the country through the utilization of governmental and public, though non-official, agencies, without involving the organization in participation in movements for legislative enactments which unavoidably take on a partisan political character.

N. I. STONE.

*Washington, D. C.*

The New York School of Philanthropy, in its announcement for the coming year, gives notice that, through the benefit of the full income of the endowment provided by Mr. Kennedy, a second year of residence work will be added to the program. Dr. Devine has been released from his administrative duties as secretary of the New York Charity Organization Society in order that he may give a larger amount of supervision to the School of Philanthropy.

The School for Social Workers, Boston, also announces the addition of a second year to its regular curriculum. This school will be transferred to new quarters at 18 Somerset St., where it is proposed to maintain a special social service library. By gift of the Boston Children's Aid Society a collection of 25,000 books and pamphlets, consisting largely of sets of reports of philanthropic agencies in the United States and foreign countries has been received.

Professor T. N. Carver, of Harvard University, delivered a course of lectures on rural economics during the first week in July at the Graduate Summer School of Agriculture, held at the Michigan Agricultural College. This school is run coöperatively by the various state agricultural colleges and experiment stations in alternate years. One problem which has elicited considerable discussion at these schools has been the relation of farm management to general economics. The tendency seems to be more and more to demand a fundamental training in economics as preparation for teaching the problems of farm management, just as it has long been regarded necessary to have a fundamental training in chemistry, physics, and biology for the teaching of the technical agricultural subjects.

Among the members of the board of arbitration to settle the differences between the railroads east of Chicago and their engineers are to be noted Dr. Charles P. Neill, Commissioner of Labor, Judge Knapp of the Commerce Court, Dr. Albert Shaw, Frederick N. Judson, and President Van Hise.



At the Fifth Annual Congress of Mathematicians, held at Cambridge in the latter part of August, a section was devoted to statistical economics and actuarial mathematics, under the supervision of Professors Edgeworth and Bowley.

A committee has been appointed, under public authority, to report upon the question of agricultural credit in Ireland. Among the members are Professor Bastable of Dublin University and Professor Finlay of the National University of Ireland.

Professor Taussig's article on "The Report of the Tariff Board on Wool and Woolens," published in the June number of the REVIEW, has been issued as a congressional document.

Henry Holt & Co. announce the preparation of *Commercial Credit*, by Professor J. E. Hagerty. Among the topics to be discussed are credit, mercantile agencies, and bankruptcy legislation.

A translation of the major part of Miss Emily G. Balch's *Our Slavic Fellow Citizens* has just appeared as "Die Slavische Einwanderung in den Vereinigten Staaten." The translation is by Dr. Stephan von Philippovich (Leipzig & Vienna: Deuticke. Pp. x, 187).

According to the eighth *Annual Report* of the state librarian of Virginia, some fifty account books of a firm of Scottish merchants located at Falmouth, Va., in the second half of the eighteenth century, have been deposited in the state library at Richmond.

The Bureau of Labor (Washington) announces that henceforth its several publications including the annual report, bimonthly bulletins, and special reports, will be issued as bulletins. These will be grouped in series to assist the reader in selecting the classes of reports in which he may be particularly interested.

M. Liesse, professor at the Conservatoire des Arts et Métiers à l'Ecole des Sciences Politiques, has been elected to membership in the French Academie de Science Morale et Politique to fill the place made vacant by the death of M. Levasseur.

The Academie de Science Morale et Politique (Paris) has awarded the Léon Faucher prize of 3000 francs to M. Joseph Barthélemy for his work on *L'Hygiène Publique au Point de Vue Economique et Social*, and has rendered an honorarium of 2400 francs to M. Gaston Jèze for his *Traité de la Science des Finances, Cours Elementaire de Sciences des Finances et de Législation Financière Française*.

There was held in Paris, May 30-31 and June 1, a celebration in honor of the seventieth birthday of the Society of Political Economy of Paris, and of the ninetieth birthday of its first president, M. Frédéric Passy. The American Economic Association was represented by Mr. Charles W. McFarlane and Professor William G. L. Taylor. A complete report of this interesting anniversary is to be found in the *Journal des Economistes* for July. M. Passy was unable to attend on account of ill health, and on July 12 his death was announced.

#### *Appointments and Resignations*

Professor Spurgeon Bell has resigned his position at the University of Missouri to become the head of the department of commerce and administration in the University of Texas.

Dr. Roy G. Blakey, of Columbia University, has been appointed assistant professor of economics in Cornell University.

Professor Ernest L. Bogart, of the University of Illinois, has been advanced to the rank of professor of economics.

Professor David Taggart Clark, of Williams College, has been granted leave of absence and will spend the year in study and research work in Germany.

Professor Katharine Coman, after two years' leave of absence, will be again in charge of the department of economics at Wellesley College, in 1912-1913.

Dr. T. W. B. Crafer has been promoted to a full professorship in sociology in the University of Pittsburgh.

Professor F. S. Deibler, of Northwestern University, has been promoted to the rank of associate professor.

The appointment of Professor Garrett Droppers, of Williams College, as Orrin Sage professor of political economy has been made permanent.

Professor F. R. Fairchild of Yale, who for some years has been making a special study of forest taxation in this country and in Europe, delivered an address on the subject at the Fifth Annual Forest Conference at Bretton Woods, N. H., July 19, and will read a paper on "Some Suggestions for a Practical Plan of Forest Taxation" at the meeting of the National Tax Association in Des Moines, in September.

Professor H. P. Fairchild, of Yale University, has been engaged during part of the summer in a sociological survey of a section of New Haven, gathering information relating to the wages and living expenses of the working men of that city.

Mr. Ira G. Flocken has been promoted to an assistant professorship in accounting and industry in the University of Pittsburgh.

Mr. R. K. Forsyth has been appointed representative of the North American Civic League for Immigrants in Buffalo.

Mr. Fred H. Gilman has been appointed instructor in economics in Cornell University.

Dr. Theodore W. Glocker has been appointed acting associate professor in Washington University, St. Louis, to succeed Professor T. J. Ripley.

Professor B. H. Hibbard, of the Iowa State College, has been appointed professor of agricultural economics in the University of Wisconsin, College of Agriculture. He will devote his attention especially to the problems of marketing of farm products and coöperation among farmers.

Dr. J. T. Holdsworth, dean of the School of Economics of Pittsburgh University, has spent the summer in investigating certain educational, industrial, and municipal problems in European cities in connection with the Economic Survey of Pittsburgh upon which he has been engaged for several months. It is expected that this report will be published by the city authorities in book form in the early fall.

Mr. William Marion Hudson has been appointed instructor in economics at Clark University.

J. W. Jenks, for twenty-one years professor of economics and politics at Cornell University, has resigned to accept a position in New York University as professor of government and public administration, and director of political studies in the School of Commerce, Accounts, and Finance.

Professor E. W. Kemmerer has resigned his position as professor of economics and finance in Cornell University to accept the professorship of economics and finance at Princeton University. The appointment is on the new graduate school foundation.

Mr. Howard C. Kidd, of Columbia University, has been appointed instructor in commerce and transportation in the University of Pittsburgh.

Dr. Walter E. Lagerquist has resigned his position in Cornell University to accept an assistant professorship in Northwestern University. He will give courses in the field of corporation finance and investments both in the College of Liberal Arts and in the School of Commerce.

Mr. William E. Leonard, fellow in political economy in the Univer-

sity of Wisconsin, has been appointed instructor in economics in the University of Texas to fill the place of Mr. C. B. Austin who will be engaged in university extension work for the same institution.

Mr. O. G. Lloyd, who has for two years been a graduate student in agricultural economics in the University of Wisconsin, has received an appointment as assistant professor of farm management in the Iowa State College.

W. B. Millen has been appointed instructor in the department of history, politics and economics, in Princeton University.

Dr. E. T. Miller, of the University of Texas, recently was called before the Texas Welfare Commission to discuss the tax system of the state.

Professor Harry Alvin Millis, of Stanford University, has been appointed head of the department of economics at the University of Kansas.

Mr. E. L. Morgan has been elected to a position in the extension service of the Massachusetts Agricultural College, under which his duties will be to investigate economic, educational, and social conditions in communities which apply for his services; he will attempt, after careful study of the situation, to suggest ways of coöperation for rural betterment.

William Fielding Ogburn who for the past year has been an instructor in the department of history, politics and economics in Princeton University, goes to take charge of the work in economics and social science in Reid college, Portland, Oregon.

Dr. Samuel P. Orth has been appointed acting professor of politics in Cornell University for the first semester of 1912-1913, and Dr. W. Jett Lauck for the second semester.

Miss Leona Margaret Powell has been appointed instructor in economics at Vassar College.

Dr. Horace Secrist has resigned his position as chief statistician for the Wisconsin Industrial Commission to accept an assistant professorship in Northwestern University.

Mr. James Melbourne Shortliffe has been appointed instructor in economics at Dartmouth College.

Dr. W. S. Stevens, of the Wharton School, University of Pennsylvania, will next year give courses in insurance and business organization at the School of Commerce, Columbia University.

Mr. Frank H. Streightoff has been appointed instructor in economics at De Pauw University.

Professor H. C. Taylor, of the University of Wisconsin, is engaged in investigations on cooperative marketing in agriculture, for the Wisconsin Board of Public Affairs.

Dr. John K. Towles, of the University of Illinois, has resigned on account of ill health and will spend the winter recuperating in Oregon.

Dr. Francis D. Tyson, of the Wharton School, University of Pennsylvania, has received an appointment in the New York School of Philanthropy.

Mr. H. F. Waldradt has been promoted from an instructor to an assistant professor at the Ohio State University.

Dr. W. F. Willoughby has been appointed McCormick professor of jurisprudence in Princeton University. From 1890 to 1901 he was expert in the United States Department of Labor. In 1901 he succeeded Professor Hollander as Treasurer of Porto Rico where he continued until 1907. Thereafter he was for a time assistant director of the United States census, and more recently a member of the President's Efficiency Commission in Washington.

Governor Woodrow Wilson is, it would seem, the first member of the Economic Association to be nominated by a national convention for the presidency. Governor Wilson has been a member of the Association since 1886.

Mr. A. N. Young has been appointed instructor in economics in the Presbyterian college in South Carolina.

W. F. Gephart, F. A. McKenzie, and O. C. Lockhart, of the Ohio State University, have been promoted to the rank of professor.

